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CURTIS'S

BOTANICAL MAGAZINE;

OR,

Flower-Garden Displayed:

IN WHICH

The most Ornamental FOREIGN PLANTS, cultivated in the Open Ground, the Green-House, and the Stove, are accurately represented in their natural Colours.

TO WHICH ARE ADDED,

Their Names, Class, Order, Generic and Specific Characters, according to the celebrated LINNÆUS; their Places of Growth, and Times of Flowering:

TOGETHER WITH

THE MOST APPROVED METHODS OF CULTURE.

A WORK

Intended for the Use of such LADIES, GENTLEMEN, and GARDENERS, as wish to become scientifically acquainted with the Plants they cultivate.

CONTINUED BY

JOHN SIMS, M. D.

FELLOW OF THE LINNEAN SOCIETY.

VOL. XV.

Ye vallies low,
Throw hither all your quaint enamell'd eyes,
That on the green turf suck the honied showers
And purple all the ground with vernal flowers.
Bring the rathe primrose that forsaken dies,
The tufted crow-toe, and pale jessamine,
The white pink, and the pansy freakt with jet;
The glowing violet,
The musk-rose and the well-attired woodbine,
With cowslips wan that hang the pensive head,
And every flower that sad embroidery wears:
Bid Amarantus all his beauty shed,
And daffadillies fill their cups with tears,
To strew the grave where CURTIS lies.

MILTON.

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MDCCCI.

PREFACE.

A Second volume of the BOTANICAL MAGAZINE having been brought to a concluſion ſince the death of Mr. CURTIS, it ſeems proper that the very liberal encouragement this Work has continued to receive ſhould be gratefully acknowledged, the demand for it being by no means diminiſhed, notwithſtanding the irreparable loſs ſuſtained by that melancholy event, and the increaſed price, which the preſſure of the times has made neceſſary.

To a few readers it may not be totally unintereſting to learn how the Botanical Magazine came under the preſent direction. Long before his death Mr. CURTIS, perceiving his diſſolution gradually approaching, naturally became anxious to ſecure to his family the pecuniary benefits ariſing from the ſale of the Work, their ſole dependance. In order to leſſen the impediments to carrying it on, he laboured, as much as his infirm ſtate of health would permit, to arrange and increaſe the neceſſary materials. He applied to ſeveral of his moſt eminent botanical friends and obtained their promiſe of aſſiſtance. Finally, in the confidence of friendſhip, he ſubjected the future management to the controul of the preſent Editor, with whom he had many years lived in habits of intimacy. How far this confidence has been juſtified by the event, with reſpect to his family, cannot be a general concern, nor is it neceſſary to ſay any thing of the Work itſelf as far as it has hitherto proceeded: it is before a diſcerning public and it's merit will be fairly appreciated.

In the conſtruction of theſe volumes, but little uſe has latterly been made of the materials left by Mr. CURTIS for ſeveral reaſons, principally from a deſire to preſerve them as entire as poſſible for the ſervice of the proprietors, in caſe of emergency, and a wiſh to indulge our botanical readers with a repreſentation and deſcription of ſome of the novel and curious plants which are annually introduced, particularly from the Cape of Good Hope. In one natural order (the ENSATÆ of Linnæus —IRIDES of Juſſieu) ſuch additions have been made to our former

former ſtock as to render the nomenclature a maſs of confuſion. No part of Europe contains ſo copious a collection of theſe plants as the neighbourhood of London, the botanical world have therefore ſome right to expect an elucidation of this ſubject in our Magazine, and the Editor thinks himſelf particularly fortunate in having met with ſo able and liberal a coadjutor in this difficult taſk.

What has been already done will ſhew how much is due to the induſtry and ability of JOHN BELLENDEN GAWLER, Eſq. with whoſe aſſiſtance we hope in a few numbers to complete ſo lucid an arrangement of the principal part of this order, that no Botaniſt will hereafter find any difficulty in reducing the individuals to their proper genera.

The ſame Artiſts are employed in every department of the Work as in Mr. CURTIS's time. This will, it is hoped, inſure the ſame excellence of execution, which is ſuch that the figures in the Botanical Magazine, for elegance as well as correctneſs, will in general ſuffer nothing by a compariſon with the moſt expenſive botanical works, a fact loudly atteſted by the circumſtance that a large proportion of the ornaments of our moſt expenſive porcelain and cabinet ware is copied from them. The Botanical Magazine will continue to be carried on as much as poſſible on the ſame plan as by Mr. CURTIS himſelf. If ſomewhat more of critical diſcuſſion ſhould have been introduced, our botanical friends will eaſily perceive that the ſubjects demanded it, and whilſt the price is not thereby increaſed, it is not apprehended that any one will complain.

For himſelf, the Editor ſolicits the indulgence of the learned Botaniſt, an indulgence he feels to be more than ordinarily neceſſary; for being engaged in a laborious and important profeſſion, and having ever made Botany his amuſement, never a ſerious ſtudy, he has greater dependance upon the continued aſſiſtance of his more learned friends than upon the exertion of his own abilities. But, with this aid, he flatters himſelf that the Botanical Magazine will continue in every reſpect to deſerve the public favour as well as it has heretofore done.

DIANELLA CÆRULEA. BLUE DIANELLA.

Claſs and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cal. nullis. *Cor.* 6-petala. *Stam.* receptaculo inſerta. *Per.* Bacca 8-locularis polyſperma.

Specific Character.

DIANELLA *cærulea;* caule adſcendente geniculato foliis diſtichis lineari-lanceolatis carinatis margine ſpinuloris, pedunculis rectis divaricatis.

This plant is a native of New Holland, and we believe was firſt raiſed in this country from ſeeds from Port Jackſon, about the year 1783, by our much reſpected friend, the late Mr. CUFF, of Teddington, a gentleman of great zeal and aſſiduity in cultivating plants and promoting the ſcience of Botany, to whoſe liberality the *Brompton Botanic Garden* is indebted for this and many other ſcarce and beautiful plants.

It ſucceeds well in the greenhouſe, begins flowering about the month of May, and continues in bloſſom during the greateſt part of the ſummer. Is readily increaſed by parting its roots in the ſpring, and ſhould be planted in pots filled with loam and peat earth.

The Chevalier de la MARCK has given the name of *Dianella nemoroſa* to the *Dracæna enſifolia* of LINNÆUS, with which this plant has conſiderable affinity, but is certainly a diſtinct ſpecies. The *Dianella nemoroſa* of JACQUIN, figured in his *Hort. Schoenb. t.* 94. appears to be different from both.

We have adopted the name by which it is known in thoſe collections about town which poſſeſs it.—We hope to take another opportunity of ſaying ſomething more on this genus as diſtinguiſhed from *Dracæna.*



S. Edwards del. Pub. by W. Curtis St. Geo. Crescent Feb. 1. 1801 F. Sansom sculp

STAPELIA LENTIGINOSA. FRECKLED STAPELIA.

Claſs and Order.

PENTANDRIA DIGYNIA.

Generic Character.

Contorta. *Nectar.* duplici ſtellula 5-phylla tegente genitalia.

Specific Character.

STAPELIA *lentiginoſa*, corollis decem-dentatis, laciniis alternis obſoletis, fundo concavo orbiculo elevato cincto; caulibus ſuperne ramoſis, ramis pentagonis patentibus tuberculoſis: tuberculis uncinatis.

When the Hortus Kewenſis of Mr. AYTON was publiſhed, there were only five ſpecies of Stapelia known in this country, and of theſe two had been newly introduced by Mr. FRANCIS MASSON. This laborious inveſtigator of nature has ſince deſcribed and figured forty-one new ſpecies, the flowers of many of which are extremely beautiful as well as ſingular in their appearance. On carefully examining all theſe ſpecies, as well as thoſe before known, we cannot find that our plant in every reſpect exactly correſponds with any one of them. In the colour and ſhape of the corolla, it agrees very well with the *guttata*, but in this the flowers ſit on longer peduncles, which ariſe from the baſe of the ſtalk, the ſtalks are undivided, and the tubercles are not hooked; on which account we deem ourſelves juſtified in conſidering it as a new ſpecies.

The ſpecimen from which our figure was taken, flowered in the collection of E. D. WOODFORD, Eſq. at Vauxhall, laſt ſummer, who received it from the royal garden at Kew, into which this ſpecies alſo was introduced by Mr. FRANCIS MASSON.

For the proper mode of culture, ſee our account of *Stapelia variegata.*



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SEMPERVIVUM GLOBIFERUM. GLOBULAR HOUSELEEK.

Class and Order.

DODECANDRIA DODECAGYNIA.

Generic Character.

Cal. 12-partitus. *Petal.* 12. *Capſ.* 12. polyſperm.

Specific Character and Synonyms.

SEMPERVIVUM *globiferum*, foliis ciliatis, propaginibus globoſis. *Spec. Plant.* 665. *Edit. Willdenow*, 952. *Jacquin Auſt.* 5. *p.* 50. *tab. app.* 40.

SEDUM roſulis ciliatis, petalis, ſubulato-lanceolatis duodenis. *Haller Hiſt. n.* 950.

SEDUM majus vulgari ſimile, globulis decidentibus. *Moriſon*, 3. *p.* 472. *ſ.* 12. *t.* 7. *f.* 18.

This plant being a native of Ruſſia and Germany, is perfectly hardy, eaſily bearing our winters in any dry ſituation.

Like moſt ſucculent plants, it grows beſt in a dry light ſoil, ſuch as loam mixed with lime rubbiſh, &c.

We are told by Mr. AYTON, that it was cultivated by Mr. PHILIP MILLER in 1731, but was probably loſt from our gardens till it was again introduced by the late Mr. CURTIS.

It flowered for the firſt time in the Brompton Botanic Garden laſt ſummer.



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S. Edwards del. Pub. by W. Curtis, St. Geo. Crescent Mar.1 1801. F. Sansom sculp.

CHRYSANTHEMUM TRICOLOR. THREE-COLOURED CHRYSANTHEMUM.

Class and Order.

SYNGENESIA POLYGAMIA SUPERFLUA.

Generic Character.

Recept. nudum. *Pappus* marginatus. *Cal.* hemisphæricus imbricatus, squamis marginalibus membranaceis.

Specific Character and Synonym.

CHRYSANTHEMUM *tricolor*, foliis duplicato-pinnatifidis, pinnulis linearibus distantibus recurvis, caule erecto ramoso.

CHRYSANTHEMUM *tricolor*. *Andrews's Botanical Repository, pl.* 109.

This beautiful *Chrysanthemum* was brought from Petersburgh by Mr. FRASER, of King's-Road, Chelsea, in 1798, by whom we are informed, that it is an annual of easy culture, growing readily from either seeds or cuttings; it has hitherto been confined to the greenhouse, but perhaps is an hardy plant.

It is probably a native of *Barbary* or *Morocco*, having been raised at the royal garden at Kew from seeds sent from that quarter by Mr. BROUSSONET, and has considerable affinity with the *trifurcatum* of M. DESFONTAINES, figured in his *Flora Atlantica, tom.* 1. *tab.* 335. *f.* 2.

A less pleasing variety occurs with perfectly yellow flowers.

SOPHORA AUSTRALIS. BLUE SOPHORA.

Class and Order.

DECANDRIA MONOGYNIA.

Generic Character.

Cal. 5-dentatus, ſuperne gibbus. *Cor.* papilionacea; alis longitudine vexilli, *Legumen.*

Specific Character and Synonyms.

SOPHORA *auſtralis*, foliis ternatis ſubſeſſilibus glabris, ſtipulis enſiformibus. *Syſt. Vegetab.* 391. *Ait. Kew.* 2. *p.* 45.

PODALYRIA *auſtralis*, foliis ternatis petiolatis, foliolis obovato-lanceolatis obtuſis; ſtipulis lanceolatis acutis petiolo duplo longioribus. *Spec. Plant. Willdenow, p.* 503.

This is an hardy herbaceous perennial, growing well in a light ſoil and open ſituation, and flowering about the beginning of June.

It is a native of Carolina, and an old inhabitant of our gardens, having been cultivated by Mr. PHILIP MILLER in 1758.

Its near reſemblance in habit to ſome of the Lupins, has occaſioned it to be ſometimes miſtaken for the *Sophora lupinoides* of LINNÆUS, which has yellow flowers.



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CONVALLARIA BIFOLIA. LEAST SOLOMON'S SEAL.

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cor. sexfida. *Bacca* maculosa 3-locularis.

Specific Character and Synonyms.

CONVALLARIA *bifolia* foliis cordatis floribus tetrandris. *Syst. Vegetab.* 335. *Ait. Kew. p.* 456.
LILIUM CONVALLIUM minus. *Bauh. Pin.* 304.
UNIFOLIUM. *Hall. Helv. n.* 1240.
MONOPHYLLON. *Ger.* 330. *f.* 2. *emac.* 409.

There are few genera in which the parts of fructification vary so much, both in form and number, as in *Convallaria*; LINNÆUS makes three divisions of the species, first, such as have bell-shaped flowers, as Lily of the Valley; second, such as have funnel-shaped, as common Solomon's Seal; and third, such as have wheel-shaped, as the present plant; the unripe spotted berry is said to afford a mark of distinction common to the whole; but how few are there who have an opportunity of seeing this in all the different species?

Most of these plants are ornamental, and many of them have been long cultivated in our gardens for their fragrance, and the beauty of their foliage or flowers; the present small and delicate species was cultivated and figured by Mr. MILLER in 1739.

It seldom rises above the height of four or five inches; the flowering stem is usually furnished with two, sometimes only one leaf, and is terminated by a loose spike of white flowers, which appear in May, and with us are rarely succeeded by fruit.

" It is a native of the North of Europe, Holland, Germany, " Switzerland, and Carniola. Mr. MILLER gathered it near " Haerlem and the Hague, where Mr. RAY had gathered it " before on the 28th of May in flower." *Mart. Mill. Dict.*

Is a hardy perennial, increasing greatly by its creeping roots, on which and on other accounts, it is best kept in pots with the smaller alpines; plants which are regarded by me as so many beautiful cabinet pictures, to others they will not appear in the same light.

" Non omnes arbusta juvant, humilesque myricæ."



S. Edwards del. Pub. by W. Curtis, St Geo. Crescent, Mar^{ch} [illegible] F. Sansom sculp.



S Edwards del Pub by W Curtis S.t Geo: Crescent Apr.l 1.st 1804 F. Sansom sculp.

CHIRONIA LINOIDES. FLAX-LEAVED CHIRONIA.

Clafs and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cor. rotata. *Piſtillum* declinatum. *Stam.* tubo corollæ inſidentia. *Antheræ* demum ſpirales. *Peric.* 2-loculare.

Specific Character and Synonyms.

CHIRONIA *linoides* herbacea foliis linearibus. *Linn. Syſt. Vegetab. ed.* 14. *Murr. p.* 229. *Ait. Kew. v.* 3. *p.* 487.

RAPUNTIO affinis lini facie capitis b. ſpei. *Breyn. Cent.* 175. *t.* 90.

The *Chironia baccifera* already figured, afforded a ſingular inſtance of variation from the generic character in its ſeed veſſel; in the preſent ſpecies we have as remarkable a one in the antheræ, which do not finally aſſume the ſpiral appearance ſo peculiarly characteriſtic of the genus; yet in all other reſpects it is a perfect *Chironia*, and a very neat pretty greenhouſe plant it is, occupying but little room, and enlivening the collection by its bloſſoms, plentifully produced during moſt of the year, and eſpecially at the cloſe of ſummer; it requires to be frequently renewed, which is eaſily done, as it ſtrikes readily from cuttings; it requires alſo more warmth in the winter than moſt greenhouſe plants, and as it is apt to go off in cold moiſt ſeaſons, it will be prudent to keep a pot or two of it on the front ſhelf of the ſtove during ſuch unfavourable weather.

LINNÆUS deſcribes it as having an herbaceous ſtem, and Mr. AYTON marks it as an herbaceous plant; but ſurely it is not herbaceous, in the ſtrict ſenſe of the word, nor is it ſo regarded by cultivators.

It is a native of the Cape, and was introduced by Mr. MASSON in 1787.

CAMPANULA PUMILA. DWARF-CAMPANULA.

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cor. campanulata fundo clauſo valvulis ſtaminiferis. *Stigma* 3-fidum. *Capſ.* infera, poris lateralibus dehiſcens.

Specific Character and Synonyms.

CAMPANULA *pumila*, foliis radicalibus ovatis crenatis, petiolis complanatis, floribus racemoſis ſecundis cernuis.

CAMPANULA *rotundifolia var.* β. *Spec. Plant.* 232. *Ait. Kew.* 1. *p.* 219.

CAMPANULA *minor rotundifolia alpina. Bauh. Prod.* 34.

CAMPANULA *puſilla*, foliis omnibus ſerratis, radicalibus cordato-ovatis, firmis nitidis: caulinis linearibus alternis remotis. *Jacq. Collect.* 2. *p.* 79. ?

Having ſeen this *Campanula* cultivated in the Botanic Garden, both at Lambeth-Marſh and Brompton, for many years, during which time it has always preſerved its diſtinguiſhing features. We cannot heſitate in conſidering it as a diſtinct ſpecies from the *rotundifolia*, of which LINNÆUS has made it only a variety. It is a plant of much humbler growth, the radical leaves are never reniform, are frequently continued a conſiderable way up the ſtem, and grows upon ſhorter footſtalks, which are flattened, not filiform; they likewiſe continue during the flowering, forming a mat, whereas thoſe of the *rotundifolia* for the moſt part diſappear at this ſeaſon. The *ceſpitoſa* of SCOPOLI is probably a variety of this. JACQUIN having quoted SCHEUCHZER's *Campanula*, *fig.* 4. *It.* 4. as a ſynonym of his *puſilla*, which appears very diſſimilar to ours, makes it ſomewhat uncertain whether his plant may be the ſame, as he has not given us any figure; on which account we adopt the name of *pumila*, by which it has been long known in the Botanic Garden. There is a white variety; both ſorts bear a profuſion of flowers, and are very ornamental, particularly ſuited to adorn rock-work, being hardy perennials.



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ALOE VARIEGATA. PARTRIDGE-BREAST ALOE.

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cor. erecta, ore patulo fundo nectarifero. *Filam.* receptaculo inserta.

Specific Character and Synonyms.

ALOE *variegata* subacaulis, foliis trifariis pictis canaliculatis: angulis cartilagineis, floribus racemosis cylindricis. *Thunb. Aloe, n.* 12. *Ait. Kew. v.* 1. *p.* 470.

ALOE *variegata* floribus pedunculatis cernuis racemosis prismaticis: ore patulo æquali. *Linn. Sp. Pl. ed.* 3. *p.* 459.

ALOE africana humilis, foliis ex albo viridi variegatis. *Comm. præl.* 79. *t.* 28. *var.* 27. *t.* 27.

So many desirable points unite in this Aloe, that we are not to wonder at its being held in such very high esteem by all that have the least taste for plants, especially those of the succulent kind; we frequently see it nursed up with great care by those who have only the convenience of a parlour window, and succeed better with such than in the greenhouses of many: it grows readily and blows freely but irregularly, during most of the summer months; its foliage is beautiful both in its form and markings, and its flowers are no less handsome; it rarely exceeds a foot or a foot and a half in height, when in flower; is increased by offsets, and requires the same treatment as the Aloe tribe in general.

Is a native of the Cape, and was cultivated here by Mr. FAIRCHILD in 1720, *Blair's Bot. Eff.*

MILLER informs us, that he raised a variety of it from Cape seeds with broader and more spreading leaves and a taller flowering stem.



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LOBELIA BICOLOR. SPOTTED LOBELIA.

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cal. 5-fidus. *Cor.* 1-petala irregularis. *Antheræ* ſubcoalitæ. *Capſ.* 2—5-locularis infera.

Specific Character and Synonyms.

LOBELIA *bicolor*, caulibus patulis foliis inferioribus oblongis dentatis pubeſcentibus ſubſeſſilibus, corollis bilabiatis: labio ſuperiori reflexo.

In ſo extenſive a genus as the Lobelia, ſo few of which have been accurately figured, or even fully deſcribed, it is not to be wondered at if ſome confuſion ſhould prevail. This is eſpecially the caſe among the ſmaller ſpecies.

The pretty lively little plant which is here figured, flowered laſt ſummer in the Botanic Garden at Brompton, and in ſome other collections about town; the bright blue corolla diſtinguiſhes it at firſt ſight from the *pubeſcens*, which has white flowers; we were, however, inclined to conſider it only as a variety, but from a conſideration of the deſcription and figure, by Mr. SALISBURY, in his *Icones plantarum rariorum*, it ſeems to differ in many material points, and poſſibly it may be the very plant that he has diſtinguiſhed from his *alyſſifolia*, the *pubeſcens* of the Kew Catalogue, under the name of *Lobelia Erinoides*; but certainly is not the *erinoides* of LINNÆUS, a ſmaller, more delicate, trailing plant with flower-ſtalks ſhorter than the leaves. It agrees ſo well with the ſpecific character of *Lobelia Erinus*, as given in the *Mantiſſa Plantarum*, that we were once inclined ſo to determine it; but upon a careful examination of the ſpecimens in Sir JOSEPH BANKS's *Herbarium*, it appears to be certainly different from the one which is there marked, as having been compared with the Linnean *Herbarium*; nor does it appear perfectly to correſpond with any ſpecimen in Sir JOSEPH's extenſive collection: we hope therefore to ſtand excuſed for having applied a new name and ſpecific character. This we do always unwillingly, and never, when we can be tolerably ſatisfied that our plant is the ſame that has been previouſly deſcribed.

It is an annual which readily perfects its ſeeds if brought forward by being ſown in a hot-bed in the Spring, and treated the ſame as other tender annuals.



S. Edwards del. Pub by W. Curtis, St. Geo. Crescent, May 1. 1821 [illegible] sculp.

LITHOSPERMUM ORIENTALE. YELLOW GROMWELL, or BUGLOSS.

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cor. infundibuliformis, fauce perforatâ nuda. *Cal.* 5-partitus.

Specific Character and Synonyms.

LITHOSPERMUM *orientale*, ramis floriferis lateralibus bracteis cordatis amplexicaulibus. *Linn. Syst. Vegetab. p.* 156.
ANCHUSA *orientalis. Sp. Pl.* 191.
BUGLOSSUM *orientale* flore luteo. *Tournef. cor.* 6. *Buxbaum. Cent.* 3. *p.* 17. *t.* 29. *Dill. Elth.* 60. *t.* 52. *f.* 60.
ASPERUGO *divaricat. Murr. in Comment. Gott.* 1771. *p.* 25. *t.* 2.

This is a hardy, perennial, herbaceous plant, a native of the Levant, of some value on account of its early flowering and its long succession; the first may be still forwarded by placing it under a frame.

It is propagated by seeds, by cuttings, or by parting its roots in the Autumn, and will grow in almost any situation.

Though cultivated in the Botanic Garden at Chelsea, in the year 1713, it is by no means common.

It flowers in the open ground in May and June, and continues in blossom the greatest part of the Summer.



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S. Edwards del. Pub. by W. Curtis, 1st Oct. 1829.

SPARMANNIA AFRICANA. AFRICAN SPARMANNIA.

Class and Order.

POLYANDRIA MONOGYNIA.

Generic Character.

Cor. 4-petala, reflexa. *Nectaria* plura toruloſa *ſtamina cingentia. Cal.* 4-phyllus. *Capſ.* angulata, echinata, 5-locularis.

Specific Character and Synonyms.

SPARMANNIA *africana. Linn. Suppl. Pl. p.* 266. *Retzii Obſervationes Botanicæ, f.* 5. *t.* 3.

This beautiful ſhrub is a native of the Cape of Good Hope, from whence it was introduced by the celebrated traveller whoſe name it bears. It grows to the height of ſix feet or more, is thickly divided into alternate branches, finely clothed with large cordate and lobed pendulous leaves upon erect footſtalks, making a very handſome appearance even in foliage, in which ſtate it much reſembles a ſida; its fine umbels of flowers are produced plentifully along the young branches oppoſite the leaves, in the ſame manner as in the common ſpecies of *Pelargonium*, which it is very like in its infloreſcence, the flowers nodding before they are expanded, and becoming erect as they approach maturity. The petals, which are of a ſnowy white, remain but a ſhort time expanded, being ſoon reflected with the calyx: this is white like the petals, but covered, as is the whole of the plant, the petals excepted, with fine hairs. The ſingular nectaries, the characteriſtic of the genus, ſurround the filaments, which they ſo nearly reſemble, that a ſuperficial obſerver might readily confound them; they are very numerous, are ſhorter than the purple filaments, of a yellow colour, toruloſe, or nobbed, at the upper part: they have no anthers, though they have purple tips not unlike them. The whole plant abounds with a taſteleſs mucilage.

The

The deſcription of the *Sparmannia* in the *Supplementum Plantarum*, is in moſt reſpects very accurate; the petals are there ſaid to be yellow: whether the plant is ſubject to vary in colour, or that an error has ariſen from the examination of dried ſpecimens, we are not at preſent able to determine.

It was firſt introduced to the Royal Garden at Kew, from whence it has been diſtributed to ſeveral collections about town, and though at preſent a ſcarce plant, will not perhaps long remain ſo, being readily propagated by cuttings, if treated in the ſame manner as ſome of the more tender *Pelargoniums*.

Our figure was drawn from a ſpecimen which flowered in great perfection the laſt month, at the Nurſery of Meſſrs. WHITLEY and Co. at Old Brompton. Except at Kew, we have not heard of its having flowered elſewhere.

LAVATERA THURINGIACA. GREAT-FLOWERED LAVATERA.

Class and Order.

MONADELPHIA POLYANDRIA.

Generic Character.

Calyx duplex, exterior 3-fidus. *Arilli* plurimi monospermi.

Specific Character and Synonyms.

LAVATERA *thuringiaca* caule herbaceo, fructibus denudatis, calycibus incisis. *Linn. Syst. Vegetab. ed.* 14. *Murr. p.* 626. *Jacq. Fl. Austr. v.* 4. *t.* 311.

LAVATERA *thuringiaca* foliis inferioribus cordatis crenatis subrotundo-lobatis summis hastatis, pedunculis longis, solitariis, unifloris. *Linn. Syst. Nat. ed.* 13. *Gmel.* 1057.

ALTHÆA *thuringiaca* grandiflora. *Dill. Hort. Elth.* 9. *t.* 8. *f.* 8.

ALTHÆA flore majore. *Bauh. Pin.* 316.

We have already figured in this work a species of Lavatera, the *trimestris*, the two varieties of which, the white and red, may vie with any of our annuals in contributing to the gaiety of the flower borders; the present species is a hardy perennial, and when it grows in perfection, produces flowers equally large.

Though cultivated by Mr. SHERARD in the year 1732, it is rarely met with in any of our collections; yet as an ornamental plant, it is certainly deserving of culture, especially by those who have large gardens, and who aim at great variety.

It is a native of Thuringia, as its name imports, and various parts of the North of Europe; flowers from July to September, and ripens its seeds in Autumn, by which the plant is easily raised, or it may be increased by parting its roots.

In the *Hortus Kewensis* it is by mistake marked as a shrub.

The base of the division of each petal is singularly puckered, a character which authors do not appear to have sufficiently noticed.



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PELARGONIUM TOMENTOSUM. PENNY-ROYAL CRANE'S-BILL.

Class and Order.

MONADELPHIA DECANDRIA.

Generic Character.

Cal. 5-partitus: lacinia ſuprema deſinente in tubulum capillarem nectariferum ſecus pedunculum decurrentem. *Cor.* 5-petala, irregularis. *Fil.* 10 inæqualia, quorum 3 (raro 5) caſtrata. *Fruct.* 3-coccus, roſtratus: roſtra ſpiralia introrſum barbata.

Specific Character and Synonyms.

PELARGONIUM *tomentoſum*, umbellis multifloris ſubpaniculatis foliis cordatis, haſtato quinquelobis villoſis molliſſimis. *Spec. Pl. edit. Willdenow*, 677.

PELARGONIUM *tomentoſum*, umbellis multifloris ſimplicibus compoſitiſque, foliis cordatis ſubquinquelobis, ſerratis, tomentoſis, molliſſimis, caule carnoſo. *Jacq. Icon. rar.* 3. *tab.* 537. *Collect.* 5. *p.* 240.

This ſpecies, although introduced ſince the publication of AITON's *Hortus Kewenſis*, is now very common, being a quick grower, and very eaſily propagated by cuttings. It is generally known in the gardens by the trivial name of *piperitum*, and our gardeners uſually underſtand by *tomentoſum* a very different and a more rare and tender kind, the *blattarium* of JACQUIN, figured under the name of *Geranium tomentoſum*, by Mr. ANDREWS, in his Botaniſt's Repoſitory, pl. 115; but as our plant has been long ago deſcribed and figured by JACQUIN, in his *Icones plantarum rariorum*, who has called it PELARGONIUM *tomentoſum*, and the ſame has been adopted by WILLDENOW, in his new edition of the *Species Plantarum*; it is become neceſſary to correct the vulgar appellation, in order to adhere to a name under which it has been already publiſhed.

It forms a large buſhy ſhrub, but the branches being brittle and the tops heavy, is very apt to be broken and diſfigured by the wind. It is not remarkable for the beauty of its flowers, and the odour is too ſtrong to be pleaſant to many perſons, though to others it is very agreeable, much reſembling Penny-Royal.

LILIUM PHILADELPHICUM. PHILADELPHIAN LILY.

****

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cor. 6-petala, campanulata: linea longitudinali nectarifera. *Capf.* valvulis pilo cancellato connexis.

Specific Character and Synonyms.

LILIUM *philadelphicum* foliis verticillatis floribus erectis, corolla campanulata: petalis unguiculatis. *Spec. Pl.* 435. *Ait. Hort. Kew.* 1. *p.* 431. *Miller Icon. Plant. t.* 165. *f.* 1.

The Philadelphian Lily was firſt cultivated in this country by Mr. PHILIP MILLER, in the year 1757, who received roots of it from Mr. JOHN BARTRAM of Philadelphia, its firſt diſcoverer. Its bulbs are ſmall, white, and ſcaly, and produce each a ſingle ſtem, ſomewhat more than a foot high, bearing at the ſummit two flowers, and clothed with a few whorls of entire lanceolate leaves, which in our ſpecimen were longer and more reflexed than as deſcribed and figured by Mr. MILLER.

It flowers in July, but produces no ripe ſeed in this country.

The ſame treatment is proper for this Lily as for the *Lilium Catesbæi*, figured in the Botanical Magazine, pl. 259.

MILLER ſays, that both theſe are leſs hardy than ſome of the other ſorts, and ought therefore to be protected in very ſevere winters by covering the beds with old tan or coal-aſhes, to preſerve them from the froſt, and in the ſpring this covering may be removed before the bulbs ſhoot up.



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MORÆA SPIRALIS. SPIRAL-FLOWERED MORÆA.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Cor. ſubmonopetala 6-partita inæqualis: laciniis erectis. *Stigmata* 3 petaliformia.

Specific Character and Synonyms.

MORÆA *ſpiralis* caule compreſſo articulato multifloro, foliis enſiformibus erectis, floribus axillaribus. *Linn. Suppl.* 99.

MORÆA *ſpiralis* ſcapo compreſſo articulato, foliis erectis, floribus alternis ſubſecundis. *Sp. Pl. edit. Willdenow*, 1. 240. *Thunberg. Diſſ. No.* 2. *Prod. p.* 10.

As this is undoubtedly the ſame plant which THUNBERG has called MORÆA *Spiralis*, we rather continue the name than attempt any innovation, which is at leaſt much better deferred till the whole family ſhall undergo a reviſion. It certainly has but little affinity with ſeveral of the other ſpecies of *Moræa*, and WILLDENOW has queſtioned whether it ſhould not be referred to *Ariſtea*: it ſeems however to differ in too many eſſential points from the ARISTEA *cyanea* to admit of their being united.

The root is ſtringy, the leaves enſiform and erect; the ſcape ſimple, erect, near a foot high, two-edged, jointed, ſlightly twiſted; the ſpatha two-valved, entire; the flowers alternate, with ſhort peduncles, and moſtly directed one way; the corolla conſiſts of ſix equal petals, which expand evenly, are white within with a purple baſe and become tranſparent between the veins as they decline; when they cloſe, they twiſt round one another in a curious manner; the ſtyle is longer than the ſtamens, and terminates in three fringed ſtigmas of a bright purple colour. THUNBERG probably deſcribed the ſtigma as ſimple and villous, from examining it at too early a ſtage before it was expanded. Our figure was drawn from a ſpecimen which flowered in April laſt at Mr. WOODFORD'S, at Belmont-Houſe, Vauxhall. It is a native of the Cape, and requires the ſame treatment as the ARISTEA *cyanea*.

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OROBUS VERNUS. EARLY-FLOWERING OROBUS or BITTER-VETCH.

Class and Order.

DIADELPHIA DECANDRIA.

Generic Character.

Stylus linearis. *Cal.* basi obtusus: laciniis superioribus profundioribus brevioribus.

Specific Character and Synonyms.

OROBUS *vernus* foliis pinnatis ovatis, stipulis semisagittatis integerrimis, caule simplici. *Linn. Syst. Veget. ed.* 14. *Murr. p.* 661. *Ait. Kew. v.* 3. *p.* 38.
OROBUS sylvaticus purpureus vernus. *Bauh. Pin.* 351.
OROBUS venetus. Blue upright everlasting Pease. *Park. Parad. p.* 337. *f.* 13.

The OROBUS *vernus* is a hardy perennial, a native of Switzerland and Germany, growing to about the height of a foot, or a foot and a half, and producing numerous shewy flowers in spikes, at first of a bright purple colour, afterwards blue, frequently, but not in all situations, succeeded by seed-vessels, sparingly productive of seeds; the fertility of the plant in this respect depends as much on the favourableness of the season as on soil and situation; for the cold Easterly winds which frequently prevail in April, when this plant is in blossom, not only mar its beauty, but render it unfruitful; hence it is often necessary on these occasions, to cover it with a hand-glass if growing in the open border, or to remove it into the greenhouse if kept in a pot; but by gentle forcing we guard against all accidents of weather, and may thus possess it in the greatest perfection.

It is usually propagated by parting its roots in Autumn, or early in the Spring; may also be raised from seeds, which we should be careful to gather in time; prefers a soil moderately stiff and moist, and a sheltered situation.



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IXIA PATENS. SPREADING-FLOWERED OR CRIMSON IXIA.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Cor. 6-partita campanulata regularis. *Stigmata* 3.

Specific Character and Synonyms.

IXIA *patens*; tubo filiformi, limbo campanulato-patente: laciniis oblongis, filamentis coarctatis erectis, stigmatis laciniis antheras subæquantibus. *Gawler Ensat. African. inedit.*

IXIA *patens* foliis subensiformibus glabris, racemo terminali, corollis campanulatis patulis: laciniis alternis angustioribus, filamentis erectis. *Aiton Hort. Kew. t.* 1. *p.* 59.

IXIA *aristata.* *Schnev. Icon. tab.* 32.

IXIA *flaccida.* *Salisb. prodrom.* 35.

IXIA *concoler.* *Ibid.* 36. } an hujus varietates?

IXIA *conica.* *Ibid.* 36. }

In this very numerous family, in which even the limits of the genus are as yet far from being well ascertained, there is often great difficulty in tracing out the synonyms of preceding authors. In this instance we acknowledge ourselves entirely indebted to JOHN BELLENDEN GAWLER, Esq. from whose labours we may soon expect to see this difficult subject elucidated, as he is about to publish a new arrangement of the natural order of Ensatæ.

This

This very ſhewy Ixia, the brilliancy of whoſe flowers it is impoſſible to imitate by art, is a native of the Cape, and has been of late years frequently imported from Holland by the name of IXIA *kermeſina*; but was, as we are informed by Mr. AITON, firſt introduced into this country by the late Dr. WILLIAM PITCAIRN in the year 1779.

It varies much in the breadth and length of the ſegments of the limb, and in colour from a deep crimſon to a light vermillion; in the length and breadth of the leaves, which are ſometimes nearly lanceolate, at others linear-enſiform, ſometimes nearly equal to the ſtem, ſometimes not half the length. Some varieties have, as in our figure, a ſmall greeniſh ſtar at the baſe, in others the colour is uniform. All are ſcentleſs and flower nearly at the ſame time. It varies alſo much in the number of flowers, and the ſcape is ſometimes ſimple, at others a little branched.



Edwards del. Pub. by W. Curtis, St. Geo: Crescent, July 1 [illegible]

IXIA FISTULOSA. HOLLOW-LEAVED IXIA.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Cor. 6-partita campanulata regularis. *Stigmata* 3.

Specific Character and Synonyms.

IXIA *fistulosa*; foliis teretibus fistulosis obtusissimis innocuè mucronatis, scapo flexuoso, floribus spicatis distichis.
IXIA *teretifolia. Herbar. Banks.*
GLADIOLUS *fistulosus* spica disticha foliis teretibus fistulosis. *Jacq. Hort. Schoenbr. tom.* 1, *tab.* 16.

The IXIA *fistulosa* of the Botanist's repository having been already figured by JACQUIN, and called *radiata*, ought to retain that name *; we therefore feel ourselves at liberty to adopt this, although for a very different plant. We have rather ranked it with Ixia than Gladiolus, because of the near affinity it bears to the IXIA *spicata* and plantaginea of WILLDENOW, which is so great as to require seeing them all in a living state to determine whether the three are really distinct or merely varieties of each other. It agrees too with the character of this genus in the regularity of the corolla, and in not having the filaments and style bent down as in Gladiolus.

It grows from a small round bulb, which is covered with a brown fibrous coat; the leaves are perfectly smooth, round,

* Vide Recensio Plant. Reposit. Botanic. No. 4.

inflated,

inflated, larger towards the end, very obtuſe, with a ſmall ſoft point, or mucro; the ſcape is a great way encloſed in the ſheathing leaves, the flowering part only being protruded, which generally bends down and then riſes as in the figure. The flowers form an imbricated diſtich ſpike, are without ſcent, and ariſe from a ſpathe of three valves. In the lower part of the ſpike, and ſometimes for the whole length, no flowers are produced, but a ſmall bulb is contained in the outer valve of the ſpathe, of the ſize and form of a grain of oat, which JACQUIN conſidered as an abortient flower encloſed in the internal valves of the ſpathe; but Mr. GAWLER having planted theſe bodies they all grew, which proves them to be real bulbs.

The IXIA *fiſtuloſa* is a native of the Cape of Good-Hope, and that from which our figure was drawn was imported from thence by ED. WOODFORD, Eſq. in whoſe collection it flowered in June 1800. It has been alſo imported by Mr. GRIMWOOD, Nurſeryman, at Brompton; and the ſpecimen preſerved in the Herbarium of Sir JOSEPH BANKS, marked IXIA *teretifolia*, flowered at Mr. MALCOLM'S, at Stockwell, in 1791.

It ſeems to be rather ſhy of flowering, being apt to produce bulbs inſtead of flowers; by theſe, however, as the experiment of Mr. GAWLER ſhews, it may be readily propagated.



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PELARGONIUM PULCHELLUM. NONESUCH PELARGONIUM or CRANE'S-BILL.

Clafs and Order.

MONADELPHIA HEPTANDRIA.

Generic Character.

Cal. 5-partitus: lacinia ſuprema deſinente in tubulum capillarem nectariferum ſecus pedunculum decurrentem. *Cor.* 5 petala irregularis. *Filamenta* 10 inæqualia: quorum 3 (raro 5) caſtrata. *Fructus* 5-coccus roſtratus: roſtra ſpiralia: introrſum barbata.

Specific Character.

PELARGONIUM *pulchellum*; ſubacaule, ſcapo diviſo, foliis oblongis lobato-pinnatifidis, petiolis alatis.

For this hitherto undeſcribed ſpecies of Pelargonium we are indebted to Mr. Alderman HIBBERT, in whoſe garden at Clapham-Common the choiceſt gifts of Flora are cultivated on a moſt magnificent ſcale. Not leſs with a view to the promotion of the ſcience of Botany, than the gratification of his own taſte and the inſuring a ſupply of rare plants, this gentleman was induced, at his own expence, to ſend a collector to the Cape of Good Hope, who, amongſt many others, ſent home this beautiful one, which flowered in the ſtove at Clapham in April laſt. It is particularly diſtinguiſhed from all its congeners by the winged footſtalks; theſe wings are of a more firm and rigid texture than the reſt of the leaf, and as this periſhes they change to a brown colour, become more erect, and, like a bunch of ſmall holly leaves, protect the crown of the root from being browſed, a circumſtance we learned from the examination of a dried ſpecimen ſent by Mr. MASSON, and preſerved in the Herbarium of Sir JOSEPH BANKS.

The

The whole plant is hairy and ſmells ſlightly of Tanſy.

It has only five fertile ſtamens, as is, we believe, common to moſt, if not all, the turnip and tuberous-rooted ſpecies. Theſe likewiſe differ from the cauleſcent ſpecies, in that the flower-buds do not nod, but riſe out of the involucrum erect before they open. Its ſeed-veſſels are deflected. It is a uſual circumſtance with moſt of the genus to have a joint at the baſe of the proper flower-ſtalk more remarkable in ſome ſpecies than in others. We were at firſt much ſtruck with obſerving this joint in our plant to be ſituated from one-third to nearly half the ſpace between the baſe and the flower; but in the native ſpecimen we find this is not the caſe, and are therefore inclined to impute it to the heat of the ſtove. In the ſame collection we perceived another Pelargonium, in many reſpects reſembling this, with white flowers, but whether it be a diſtinct ſpecies or merely a variety we cannot at preſent determine.

It is to be treated as one of the tenderer ſorts.



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ANTIRRHINUM TRIORNITHOPHORUM. THREE-BIRD-BEARING SNAP-DRAGON.

Class and Order.

DIDYNAMIA ANGIOSPERMIA.

Generic Character.

Cal. 5-phyllus. *Corollæ* basis deorsum prominens, nectarifera. *Capſ.* 2-locularis.

Specific Character and Synonyms.

ANTIRRHINUM *triornithophorum*, foliis quaternis [ternisque] lanceolatis, caule erecto ramoso, floribus [ternis] pedunculatis. *Spec. Pl.* 853.
LINARIA Americana maxima, purpureo flore. *Herman. Lugdb.* 377.
LINARIA flore purpureo Americana. *Riv. mon. t.* 84. *fig. bona.*

It is rather ſurpriſing that this ANTIRRHINUM, the moſt ſhewy perhaps of the whole genus, though apparently neither particularly tender nor difficult of propagation, ſhould be almoſt unknown in this country*; notwithſtanding it was cultivated by Profeſſor HERMAN, in the Botanic Garden at Leyden, more than a century ſince. The Profeſſor remarks, that it has a creeping root, by which it diffuſes itſelf widely, and puts forth freſh ſhoots every year, by which we may underſtand, that it is ſufficiently hardy to bear the Dutch winters; he tells us alſo, that it grows to the height of a man. Kept in a pot and treated

* It is not mentioned in the Kew Catalogue; we find, however, that it was in Dr. FOTHERGILL's Garden at Upton, in the year 1779.

as

as a greenhouſe plant, it riſes with ſeveral ſtems, three or four feet in length, and continues to flower during great part of the Summer, but produces no ſeed. The leaves grow in whorls of three, four, or five, but generally three at the upper part. The flowers conſtantly grow by threes upon erect peduncles, to which they are attached nearly horizontally with their mouths turned towards one another, ſo as to form a ſtriking reſemblance to three birds, from whence the name of *triornithophorum*, or *three-bird-bearing*. It has been for ſome years cultivated in the Royal Garden at Kew, but we do not know of its having yet found its way into any other collection except that of EDWARD WOODFORD, Eſq. at Vauxhall, from whence our drawing was made. It is a native of North-America, and of Portugal; and from what is remarked above, might probably be better treated as a hardy herbaceous perennial. It may be increaſed by cuttings or parting the roots.



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CORNUS FLORIDA. GREAT-FLOWERED CORNEL, or DOGWOOD.

Class and Order.

TETRANDRIA MONOGYNIA.

Generic Character.

Involucrum 4-phyllum ſæpius. *Petala* ſupera 4. *Drupa* nucleo biloculari.

Specific Character and Synonyms.

CORNUS *florida*, arborea, involucro maximo: foliolis obcordatis [potius apice indentatis.] *Spec. Pl.* 171. *Schmidt. Arb.* 2. *p.* 6. *t.* 62.
CORNUS mas Virginiana. *Cateſb. Carolin. t.* 27.

In the temperate regions of North-America this tree is much ſpoken of for its beauty, riſing from ten to twenty feet in height, agreeable in its foliage, and covered in the Spring and early part of the Summer with a profuſion of white or ſometimes roſe-coloured flowers; nor does it want beauty even in the gloomy months of Winter, from the quantity of red berries which it bears, and which at that ſeaſon afford ſuſtenance to the fineſt warbler of the woods of America, the celebrated mocking bird (Turdus Orpheus) emphatically called in the Indian language, the Hundred-Tongued Bird.

The flowers, which are not really ſuch, but are in fact an involucrum, in the boſom of which lie the ſmall and, in appearance, inſignificant flowers, begin to come out before the leaves; but, as they expand or rather increaſe ſlowly (for CATESBY tells us, that they are fully formed when they firſt come out not larger than a ſixpence, but increaſe gradually in ſize to the breadth of the hand) the tree is in perfect foliage before they arrive at their full growth. The leaves of the involucrum would hardly have been called obcordate had LINNÆUS had an opportunity of ſeeing them in a living ſtate; they approach to this ſhape by an indentation at the very point of the leaf, as if the four points had been nipped together whilſt in the bud, a form which the ſkill of our draughtſman has enabled him to expreſs far better than has been done by any preceding artiſt.

It

It is a tree of ſlow growth, and in Europe has, we believe, rarely arrived to any very conſiderable ſize. That which afforded the ſubject of our preſent figure is, perhaps, almoſt the only one in this country that can be ſaid nearly to rival thoſe of its native ſoil. It grows in the Duke of MARLBOROUGH's garden at Sion-Hill, is about ſixteen feet high, and ſpreads at leaſt eighteen, has a ſtraight trunk about ſix feet in length before it branches, meaſuring two feet in circumference a yard from the ground; the bark much reſembles an elm of the ſame ſize. This beautiful tree has flowered freely for many years paſt, but unfortunately produces no fruit. Its age is unknown, but as we have evidence of its being cultivated at Chelſea by MILLER, in 1739, it is probable that its origin may not be of much later date. We are much obliged to Mr. WHITMAN, his Grace's Gardener, for ſending us notice of this tree, and favouring us with ſpecimens and with the above dimenſions.

" It is moſt certainly propagated by ſeeds ſent from Vir-
" ginia, which ſhould be ſown immediately after their arrival,
" in boxes or pans of ſandy garden mould, and covered with
" wet moſs, to prevent the earth from drying, and placed
" where they may be protected from froſt. Theſe precautions
" are the more neceſſary, as the ſeed will lie in the ground
" till the ſecond or third year before they germinate; and
" as the young plants generally come up the latter-end of
" Summer, they are then in too tender a ſtate to reſiſt the
" froſt without ſome covering. A ſhady and ſheltered ſitua-
" tion promotes its growth and ſecures its preſervation."
Schmidt Oſter Baumzucht.

ZINNIA ELEGANS. VIOLET-COLOURED ZINNIA.

Class and Order.

SYNGENESIA POLYGAMIA SUPERFLUA.

Generic Character.

Recept. paleaceum. *Pappus* aristis 2 erectis. *Cal.* ovato-cylindricus, imbricatus. *Flosculi* 5–10 radii persistentes integri.

Specific Character and Synonyms.

ZINNIA *elegans*, foliis amplexicaulibus, floribus pedunculatis, hermaphroditorum seminibus brevissime mucronatis. *Jacq. Icon. rar.* 589. *Coll.* 5. 152.

ZINNIA *violacea*, foliis ovato-acutis sessilibus subconnatis, palearum apicibus fimbriato-serratis. *Cavan. Hisp.* 1. 57. *t.* 81. *And. Bot. Rep. t.* 55.

JACQUIN having described this ZINNIA in his Collectanea, and published a figure of it in his Icones before that of CAVANILLES, his name of ZINNIA *elegans* has the right of priority, and we of course adopt it.

It is a native of Mexico, and, being a tender annual, can only be raised from seeds, which should be sown in the Spring on a hot-bed, and by the latter-end of May should be set abroad in large pots, or may be planted out in the open border, where from its size and the beauty of its flowers, it will continue to make a conspicuous figure till destroyed by the frost.



...rd. del. Pub. by W. Curtis St. Geo: Crescent Aug. 1. 1801 E. Sm... sc.

PHLOX OVATA. OVATE-LEAVED PHLOX, or LYCHNIDEA.

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cor. hypocrateriformis. *Filamenta* inæqualia. *Stigma* 3-fidum. *Cal.* prifinaticus. *Capf.* 3-locularis, 1-ſperma.

Specific Character and Synonyms.

PHLOX *ovata*, foliis radicalibus ovatis acutis ſubcarnoſis, corymbis ſubfaſtigiatis, corollæ laciniis undulatis retuſis.

PHLOX *ovata*, foliis ovatis, floribus ſolitariis. *Linn. Spec. Plant.* 217. ?

As this ſpecies has been ſome years known in the Engliſh gardens under the name of PHLOX *ovata*, and correſponds with the ſpecimen preſerved under the ſame appellation in Sir JOSEPH BANKS's Herbarium, we do not heſitate to continue it, at leaſt till we ſhall be certain that the Linnean *ovata* is really a different plant, although it hardly ſeems probable that culture ſhould make ſuch a change as to convert a naturally ſolitary flower into ſo large a panicle.

The leaves of the ſtalk vary very much in breadth, and are ſometimes lanceolate rather than ovate, but the radical leaves, eſpecially thoſe of the young ſhoots which are puſhed out from the root after the plant has done flowering, always preſerve their character. The flowers nod on their firſt coming out. The whole plant is perfectly ſmooth.

It is a native of North-America, and, though generally conſidered as a greenhouſe plant, appears to be a hardy herbaceous perennial, and we obſerved, that when treated as ſuch at Meſſrs. WHITLEY's and Co. where it is planted in the open border in a ſoil conſiſting chiefly of a ſandy loam, it thrives better than under any other management, the roots ſending forth very vigorous ſhoots at a conſiderable diſtance from the parent plant.

Our drawing was made ſome years ago from a ſpecimen which flowered in the Botanic Garden at Brompton, ſince which time it is become much more common. It may be eſteemed one of the handſomeſt of the genus; is eaſily propagated by parting the roots, thrives beſt in a ſandy loam, and although ſufficiently hardy to reſiſt the cold of our ordinary winters, it may be ſafeſt to give ſome pots of it the ſhelter of a greenhouſe or of a melon frame.



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MELASTOMA MALABATHRICA. CINNAMON-LEAVED MELASTOMA, or BLACK STRAWBERRY-TREE.

Class and Order.

DECANDRIA MONOGYNIA.

Generic Character.

Cal. 5-fidus campanulatus. *Petal.* 5-calyci inserta. *Bacc.* 5-locularis, calyce obvoluta.

Specific Character and Synonyms.

MELASTOMA *malabathrica*; foliis integerrimis 5-nerviis lanceolato-ovatis scabris. *Spec. Plant. ed. Willdenow*, 2. 592. *Martin Miller's Dict. n.* 10. *Flor. Zeylan.* 171. *Burm. Zeyl.* 155. *t.* 73. *Ind.* 104.
KEDALI. *Rheed Malabar.* 4. 87. *t.* 42.
FRAGARIUS niger. *Rumph. Amboyn.* 4. *p.* 137. *t.* 72.

It is singular, that of this very numerous genus, of which eighty-five species are enumerated by WILLDENOW, not one should be found in the Kew Catalogue. Several of them have been introduced of late years; but, of all that we have seen, this is the handsomest, and is otherwise interesting, as being the one from which the name of the genus was framed by Professor BURMAN. This signifies black mouth, a name given to it by the vulgar, from its effect on the mouths of the children who ate of the fruit, which is filled with a black pulp. Being a native of Ceylon and other parts of the East-Indies, it must with us, always require to be kept in a stove, where it forms a handsome shrub.

Our figure was taken from a fine plant which flowered this Summer at Mr. Alderman HIBBERT's, at Clapham-Common.



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ATRAGENE ALPINA, *var.* AUSTRIACA.

Class and Order.

POLYANDRIA POLYGYNIA.

Generic Character.

Cal. o. *Cor.* duplex petalis numerosis exterioribus majoribus.

Specific Character and Synonyms.

ATRAGENE *alpina*; scandens, foliis biternatis serratis acuminatis, petalis exterioribus quaternis interioribus spathulatis. *Spec. Pl. edit. Willdenow*, 2. 1285.

ATRAGENE *alpina* foliis duplicato-ternatis serratis, petalis exterioribus quaternis. *Spec. Pl.* 764. *Jacq. Austr. t.* 241.

ATRAGENE *clematides. Crantz. Fasc. Q. t.* 5.

ATRAGENE *austriaca* foliis duplicato-ternatis serratis; caule fruticoso scandente. *Scop. Carn.* 1. 387.

CLEMATIS alpina geranifolia. *Pluk. Phyt. t.* 84. *f.* 7. *Morif. Hist.* 3. *f.* 15. *t.* 2. *f. ult.*

CLEMATIS cruciata alpina. *Ponee Bald.* 335.

The ATRAGENE *alpina* from Siberia and that from Austria, if not distinct species, are certainly permanent varieties. Our plant is undoubtedly the Austrian kind, and was first introduced to this country by Mr. LODDIGES, Nurseryman at Hackney, who raised it from seeds sent from Crane above fourteen years ago, and in his garden it has flowered freely for several years past, as also in some others to which it has been extended. Our figure was taken this Summer from a plant in the possession of Mrs. WRIGHT.

The above synonyms appear to us to belong to this variety, although it is possible they may refer to more than one sort, as the authors do not in every respect agree.

It

It branches from the very bottom into ſeveral ſlender ſtalks ſeveral feet in length, which entwine round one another and whatever ſupport comes in their way, where they are held faſt by the footſtalks of the leaves, which, after theſe decay, become woody, and continue to perform the office of claſpers. The ſtalks are truly ſarmentous, the internodes being perfectly naked. At equal diſtances of about four inches, the leaves and flowers ſpring from the ſame bud. Theſe gemmæ are generally oppoſite, conſiſt of ſeveral imbricated perſiſtent ſquamæ, the centre ones larger, membranous, and of a brown colour. It may be conſidered as an involucrum, from the boſom of which grow uſually two petioles and a peduncle bearing a ſolitary nodding flower. The petioles are an inch and half long, ſmooth, or, if examined with a lens, ſlightly pubeſcent, and divide into three branches, of which the centre one is the longeſt, each bearing a ternate leaf. The leaflets, as in moſt of the genus, are ſubject to vary conſiderably in ſhape, but in general the three terminal ones are diſtinct, ovate, acute, and more or leſs deeply ſerrated, the lateral leaflets frequently run all three into one; all are ſmooth, but veiny on the under ſide. The peduncle is longer than the leaves and ſtraight, bearing the flower nodding and the ſeeds erect. In the axillæ of the petioles the new gemmæ are formed. By this arrangement, and the perſiſtent petioles, the old knots become very large and intricate. The outer corolla conſiſts of four large petals of a fine blue colour with a white edge, are ovate, acute, and covered on the outſide, eſpecially at the margins, with a fine down. The inner petals are in fact nothing more than enlarged barren filaments; and therefore the ſeparation of this genus from Clematis, appears to us, in this inſtance at leaſt, to be neither natural nor neceſſary. The plume of the ſeed is a buſhy tail of long white hairs, but is neither ſecund, as repreſented in Jacquin's figure, nor diſtich, as deſcribed by Willdenow.

It is propagated by ſeeds only, at leaſt the experienced cultivator who introduced it, has not yet been able to ſucceed by any other mode. Is perfectly hardy, bearing the ſevereſt froſts of our climate without injury.

IRIS TUBEROSA. SNAKE'S-HEAD IRIS, or VELVET FLOWER-DE-LUCE.

****

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Cor. 6-partita: laciniis alternis reflexis. *Stigmata* petaliformia.

Specific Character and Synonyms.

IRIS *tuberosa;* imberbis foliis tetragonis. *Thunb. Diss. n.* 43. *Spec. Plant. edit. Willdenow,* 1. 240. *Martin Miller's Dict. n.* 47. *Swert Floril. t.* 36.

IRIS *tuberosa,* folio anguloso. *Bauh. Pin.* 40. *Morif. Hist.* 2. *p.* 348. *f.* 4. *t.* 5. *f.* 1. *Lobel. Hist.* 51. *figura melior. Dod. Stirp.* 249. *fig. eadem. Gerard. emac.* 103. *eadem. Park. Parad. p.* 188. *t.* 185. *f.* 6.

HERMODACTYLUS folio quadrangulo. *Tourn. Cor.* 50.

This species of IRIS, readily distinguished from every other by its quadrangular leaves, is more remarkable for the singularity than for the beauty of its flowers; yet, to some minds not apt to be caught by gaudy attire, these sombre tints have their charms. In this respect it strongly contrasts with our next figure.

It is a native of the Levant, and with respect to the cold of our climate is perfectly hardy, flowers best, according to MILLER, in an eastern aspect, and if the soil be light it will be proper to put some rubbish at the bottom to prevent the roots descending too deep, in which case they seldom produce flowers.

It blossoms in April or May, rarely produces seed with us, but is easily propagated by offsets from the roots, which may be taken up when the leaves decay, but should not be kept long out of the ground*.

* MARTIN MILLER's Dict.



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FERRARIA TIGRIDIA. MEXICAN FERRARIA, or TIGER-FLOWER.

Class and Order.

MONADELPHIA TRIANDRIA.

Generic Character.

Spatha 2-phylla. *Cal.* 0. *Petala* 6. 3-externis latioribus. *Stylus* 1. *Capſ.* 3-loculari infera.

Specific Character and Synonyms.

FERRARIA *Tigridia*; foliis plicatis, corollis lato-urceolatis: laciniis interioribus depreſſo-interſectis.

FERRARIA *pavonia*; caule ſimplici flexuoſo, foliis equitantibus enſiformibus nervoſis, petalis planis: interioribus duplo brevioribus panduriformibus. *Spec. Pl. edit. Willdenow*, *v.* 3. *p.* 581.

FERRARIA *pavonia*. *Linn. Suppl.* 407. *Cav. Diſſ. p.* 343. *t.* 189. *Larmarck Encyclop. v.* 2. *p.* 453. 2.

TIGRIDIA *Juſſieu. Gen. p.* 57.

MORÆA pavonia. *Thunb. Moræa*, 14, 20.

OCOLOXOCHITL ſeu flore tigris. *Hern. nov. Pl. Amer. Hiſt. tab.* 276. *Gerard. emac.* 122. 2. *Encyclop. Brit. t.* 350.

TIGRIDIS flos an Dracunculi ſpecies? *Lob. Obſ.* 59. *Icon.* 111. *Dod. pempt.* 3. *p.* 421. *Swertii Floril.* 2. *t.* 31. *fig.* 2. *J. Bauh.* 2. *p.* 684. *Raii Hiſt.* 1165. *J. Theod. de Bry, Florileg. nov. t.* 111.

Of all the above authors, no one had ſeen the living plant except HERNANDEZ, who was ſent to Mexico as a Phyſician, by PHILIP II. King of Spain; and his figure, though only a ſmall wooden cut, is more botanically correct than any of the others, not excepting that of CAVANILLES. We are informed by

by him that it grew wild about Mexico, and was much cultivated for its exceſſive beauty and for the medicinal virtues of its root; being, as he terms it, "a frigefacient in fevers, and "alſo a promoter of fecundity in women." Both HERNANDEZ and M. DE BRANCION, from whom LOBEL derived his knowledge of the plant, obſerve that the root is eſculent. All the other old authors appear to have borrowed what they have ſaid from theſe two ſources, except perhaps DE BRY, who ſays he received it (probably meaning the drawing) from CASPAR BAUHIN. The author of this figure, though it was publiſhed before the Rome edition of the Mexican hiſtory, appears to have had acceſs to the drawing of HERNANDEZ, as the form of the flower is the ſame, only four roots are crowded together. The more modern authors ſeem to have made their deſcriptions and figures from no other authority except a dried ſpecimen in the poſſeſſion of JUSSIEU. That of MUTIS, cited by the younger LINNÆUS, we have not ſeen, and has not, we believe, been as yet publiſhed.

For the poſſeſſion of this ſuperb flower, this country, and perhaps Europe, is indebted to ELLIS HODGSON, Eſq. of Everton, near Liverpool, with whom it flowered and produced ripe ſeeds about five years ago. From this gentleman, ſeeds were communicated to Meſſrs. GRIMWOOD and WYKES, and by them it has been diſperſed among other Nurſerymen. There is little fear but that it will ſoon become very common, as it flowers freely, produces ſeeds in abundance, and may be likewiſe increaſed by offsets from the roots. It has no ſcent, but in ſplendid beauty it appears to us, at leaſt when aſſiſted by rarity and ſingularity, to ſurpaſs every competitor; we lament that this too affords our fair countrywomen another leſſon, how extremely fugacious is this lovelineſs of form; born to diſplay its glory but for a few hours, it literally melts away.

By the alteration made by WILLDENOW in the generic character of FERRARIA, this may be included; but the trivial name of *pavonia*, injudiciouſly adopted from a ſuppoſed reſemblance to the IRIS *pavonia*, figured by JACQUIN (not the IRIS *pavonia* of the Botanical Magazine) is totally inadmiſſible, the colours being in no reſpect ſimilar to thoſe of the peacock; we have, therefore, as nearly as could be done in one word, reſtored the original name. We have an additional motive to do ſo from the conſideration, that ſhould it be hereafter thought neceſſary to make it a diſtinct genus from FERRARIA, the name of TIGRIDIA, already applied by JUSSIEU, would undoubtedly be given it.

DESC.

Desc. *Root*, a tunicated bulb, producing from one to four ſtems about a foot and half high, ſomewhat flexuoſe, round, jointed, ſmooth, bearing at each joint a plicated oblong-lanceolate leaf from a ſheathing petiole the length of the internode, and at the ſummit an involucrum, apparently conſiſting of two lanceolate, ancipital, conduplicate, nearly equal valves, of which the exterior is in fact the common ſpathe or involucre, and embraces the interior with its contents; the interior valve, which is exactly oppoſed to the outer one, is the proper ſpathe of the firſt flower and embraces it, together with the ſpathes and flowers that are to come in ſucceſſion; the ſpathe of the ſecond flower is oppoſed to that of the firſt, and placed between it and the pedicel of the firſt flower; and ſo of the reſt, every ſpathe being oppoſed to the one of the preceding flower and embraced by it. Theſe ſpathes are ſimilar in ſhape, but diminiſh progreſſively and become more membranaceous. *Corolla*, broad-urceolate (but this could not be expreſſed by the drawing in a front-view of the flower) divided into ſix ſegments, of which the three outer are urceolate at the baſe, expanded above, and reflected at the point; the three inner ones ſmaller by half, biformed, ſingularly divided into a lower haſtate and an upper ovate diviſion by a depreſſed interſection; the upper diviſion is of the richeſt ſcarlet imaginable, variegated by a bright golden yellow. *Filament*, a cuniculated or piped triquetral column. *Anthers*, ſeſſile, erect, bearing their pollen on the outſide, conniving at the point, diverging below to admit the exit of the ſtigmas. *Germen*, obtuſely trigonal, three-celled. *Style*, the length of the filamental column, through the hollow of which it paſſes. *Stigmas*, three, filiform, bifid. *Capſule*, oblong, obtuſely trigonal, three-celled. *Seeds*, in double rows in each cell and round.

It is a native of Mexico and Peru, is properly a greenhouſe plant, and ſucceeds beſt in light mould. Seedlings will flower the ſecond year. It is beſt to take up the bulbs the latter-end of September or October, and to keep them out of the ground till the Spring*.

* In every part of this paper, we have been very much aſſiſted by the liberal communications of John Bellenden Gawler, Eſq.



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WATSONIA ALETROIDES. ALETRIS-LIKE WATSONIA.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Spatha adpreſſa. *Corollæ* tubus gracilis: faux cyathiformi-cylindrica: limbus ſexpartitus ſubæqualis vel æqualis. *Filamenta* tubo adnata à fauce libera. *Stigm.* 3. gracilia bifida. *Capſ.* rigido-coriacea. *Sem.* oblongiuſcula plurima. *Gawler inedit.*

Specific Character and Synonyms.

WATSONIA *aletroides*; corollis ſubcernuis: tubo ſpatham ſubæquante: fauce limbi laciniis brevibus ovatis æqualibus fere quadruplo longiore. *G.*

ANTHOLYZA *aethroides*, *Burman. Flor. Cap. Prod.* 1. *Houtt. Linn. Pſl. Syſt.* 11. 77.

GLADIOLUS *tubuloſus*. *Jacq. Ic. rar.* 2. 229 *Coll.* 4. 153.

GLADIOLUS *merianus*. *Thunb. Diſſ. de Glad. p.* 14. *n.* 12. *Prod.* 7.

ANTHOLYZA *merianella*. *Ait. Kew.* 1. *p.* 67. *Curtis's Bot. Mag.* 441.

ANTHOLYZA *tubuloſa*, varietas flore variegato. *Andrews's Bot. Repoſ.* 174.

The name of Watſonia was firſt given by MILLER, in honour of our friend, the late Sir WILLIAM WATSON, and was adopted by JUSSIEU in that invaluable work his *Genera plantarum*, and will be found to form a very natural genus, ſufficiently diſtinct from Antholyza. This very elegant ſpecies, which does not appear to have been noticed by WILLDENOW, is readily diſtinguiſhed from every other by the diſtinct form of the corolla, which ſtrongly reſembles ſome ſpecies of *Aletris*, *Lachenalia*, and *Aloe*. The alternate ſegments are interior; the bulb is compreſſed and tunicated. It is very ſubject to vary, having in one inſtance a ſingle ſcape ſix or eight inches high, with three or four diſtant, ſometimes one-ranked, flowers; in another, a three or four-branched ſtem two feet high, with a terminal ſpike of from twenty to thirty cloſely imbricated diſtich flowers, and adpreſſed ſpikelets in proportion. The ſame bulb will one year produce pale pink, the next deep crimſon, and the following variegated or ſtriped corollas, as in the figure, always ſcentleſs. One of theſe varieties has been already figured in the

the Botanical Magazine, under the name of ANTHOLYZA *merianella*, vid. pl. 441. but the real ANTHOLYZA *merianella* of LINNÆUS, or GLADIOLUS *merianellus* of THUNBERG, is a different plant, having pubeſcent leaves, fewer in number, nearly ſheathing the whole ſtem, flowers differently formed, with larger and rounder ſegments, ſtigmas entire and complicate; and is in fact a *Gladiolus* nearly allied to GLADIOLUS *hirſutus* by leaf, and to GLADIOLUS *Watſonius* by the tubular throat.

As there is a ſpecimen of our plant preſerved in Sir JOSEPH BANKS's Herbarium from Kew-Garden, under the name of ANTHOLYZA *merianella*, it is not improbable that this circumſtance led Mr. CURTIS into an error, which is no diſparagement to his judgment; for ſuch is the confuſion prevailing with reſpect to theſe plants, that the moſt learned Botaniſts acknowledge their inability to determine many of them. This confuſion has partly ariſen from the difficulty of the ſubject itſelf, owing to the great number of new ſpecies that have been introduced, which were unknown to LINNÆUS or deſcribed by him from dried ſpecimens only, and to the proneneſs of theſe plants to vary; but more eſpecially from the careleſſneſs of authors, quoting falſe ſynonyms, in the firſt inſtance, and heaping blunder upon blunder by copying each other's errors, without ſufficiently ſcrutinizing the deſcriptions. The fear of adding to this confuſion has frequently deterred us from preſenting our readers with more of this beautiful tribe, and but for the aſſiſtance of Mr. GAWLER, who with infinite labour and ſkill, has been able to make out all LINNÆUS's and even THUNBERG's ſpecies, we ſhould have been tempted to have paſſed them by in deſpair.

The deſcription of THUNBERG above quoted is excellent when applied to our plant, but how he came to miſtake it for LINNÆUS's ANTHOLYZA *meriana* is not for us to unravel. JACQUIN has given a good figure of one of the varieties, but has erroneouſly deſcribed it as having a three-valved ſpathe; had he known that it had been already deſcribed by BURMAN, he would of courſe have adopted his name of *aletroides*, which poſſeſſing the right of priority, as well as being more deſcriptive, we conſider it a mere act of juſtice to reſtore.

Our figure was taken this Summer from a plant which flowered at Meſſrs. GRIMWOOD and WYKES's, Kenſington. It is of much later introduction than the date aſſigned to ANTHOLYZA *merianella* in Hort. Kew. which reſted upon the ſuppoſition of its being the ſame with WATSONIA *humilis* of MILLER, which it is not. The ſpecimen above mentioned in Sir JOSEPH BANKS's Herbarium bears the date of 1778, which may perhaps be conſidered as nearly that of its firſt introduction into this country.

ARISTOLOCHIA SIPHO. BROAD-LEAVED BIRTHWORT.

Class and Order.

GYNANDRIA HEXANDRIA.

Generic Character.

Hexagyna. *Cal.* 0. *Cor.* 1-petala, lingulata, integra. *Capſ.* 6-locularis infera.

Specific Character and Synonyms.

ARISTOLOCHIA *Sipho*; foliis cordatis petiolatis, floribus ſolitariis: limbo trifido æquali, bractea ovata, caule volubili fruteſcente. *Ait. Kew.* 3. 311. *L'Herit. Stirp. nov. p.* 13. *t.* 7. *Martin's Mill. Dict. a.* 11.

This tree, being a native of North-America, is perfectly hardy, and will grow to a very great height if properly ſupported; but, as a climber, is not able to ſupport itſelf. The large cordate leaves, which are of a fine dark green, make a very handſome appearance, and if the branches were trained over an arbour or trellis-work, for which purpoſe the plant ſeems peculiarly adapted, would form a canopy impenetrable to the rays of the ſun, or moderate rain.

The fineſt tree of this ſort we remember to have ſeen, is in the garden of the late Dr. PITCAIRN, at Iſlington, now in the poſſeſſion of Mr. WILSON, where it is planted againſt the front of the greenhouſe, to the top of which it aſcends, and clothes the pier from bottom to top in a very beautiful manner. The flowers are curiouſly formed, but, being concealed below the leaves, are not conſpicuous. The root and bark have an aromatic flavour. It was firſt ſent over to this country by Mr. JOHN BARTRAM, of Philadelphia, about the year 1763*.

It rarely ripens its ſeeds with us, but may be propagated by ſuckers.

Our figure was drawn from a tree which flowered with Mr. WILLIS, at Batterſea-Riſe, in June laſt.

* AIT. KEW.

No 534



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VIOLA PALMATA. PALMATED VIOLET.

Clafs and Order.

PENTANDRIA MONOGYNIA. *Willd.*

SYNGENESIA MONOGAMIA. *Linn.*

Generic Character.

Cal. 5-phyllus. *Cor.* 5-petala irregularis poſtice cornuta. *Antheræ* cohærentes. *Capſ.* ſupera 3-valvis 1-locularis.

Specific Character and Synonyms.

VIOLA *palmata*; acaulis, foliis palmatis quinquelobis dentatis indiviſiſque. *Gron. Virg.* 135. *Spec. Plant. edit. Willd.* 1. *p.* 1159. *Ait. Kew.* 3. 286.

VIOLA foliis palmatis ſinuatis, ſtolonum reniformibus. *Gron. Virg.* 1. *p.* 182.

VIOLA alba foliis ſecuris amazoniæ effigie Floridana. *Pluk. Amalth.* 208. *t.* 447. *f.* 9.

VIOLA virginiana platani fere foliis parvis et incanis. *Ejuſdem Mant.* 187.

This very ſingular ſpecies of Violet may be conſidered as ſtill very rare in this country, although cultivated ſo long ago as the year 1739, by PHIL. MILLER, in the Botanic Garden at Chelſea. It is a native of Virginia, and bears the winters of our climate very well. It has no ſweet ſcent to recommend it, and is therefore not likely to be in great requeſt, but by ſuch as are curious in collecting rare plants.

Our figure was taken from a plant ſent us by Mr. LODDIDGES, Nurſeryman at Hackney. Its culture is the ſame as for VIOLA *pedata* (ſee Bot. Mag. pl. 89).



S Edwards del Pub. by W. Curtis, St. Geo: Crescent

STAPELIA ASTERIAS. STAR-FISH STAPELIA.

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Class and Order.

PENTANDRIA DIGYNIA.

Generic Character.

Contorta. *Nectarium* duplici ſtellulâ tegente genitalia.

Specific Character and Synonyms.

STAPELIA *Aſterias;* ramis pluribus erectis tetragonis dentatis, dentibus brevibus erectis, corolla magna quinquefida; laciniis lanceolatis margine revolutis ciliatis. *Maſſon. Stap. n.* 14. *t.* 14.

STAPELIA *Aſterias;* corollis quinquefidis: laciniis ovato-acuminatis, margine revolutis, villoſis, pedunculis longitudine corollæ, ramis erectis tetragonis attenuatis baſi floriferis. *Spec. Plant. edit. Willdenow,* 1. *p.* 1280.

The flower of this very diſtinct ſpecies of Stapelia has a highly offenſive ſmell, appearing to us, although we are not certain that the eye might not impoſe on the imagination, to approach to the ſtink of a putrid ſtar-fiſh, as well as to reſemble it in form. The ſpecific character given by WILLDENOW is not ſo accurate as that of MASSON. In many reſpects it agrees with *hirſuta*, but differs in the ſhape of the corolla, in the want of hairs in the centre of the flower, and in the colours, which, though nearly the ſame, are reverſed, the ground of the petal in the *hirſuta* being a pale yellow, and the tranſverſe veins a dull purple.

We are obliged to Mr. LODDIGES, of Hackney, for the ſpecimen from which our drawing was made, who imported it from the Cape of Good Hope, as he did likewiſe the one we before publiſhed, from Mr. WOODFORD'S collection, under the name of STAPELIA *lentiginoſa*, and which we by miſtake derived from the Royal Garden at Kew. All the Stapeliæ are proper inhabitants of the dry ſtove, but ſucceed very well in the bark ſtove when placed on a ſhelf very near the window.



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WATSONIA ROSEO-ALBA. LONG-TUBED WATSONIA.

Claſs and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Spatha adpreſſa. *Corolla* recurva: tubus fauce cyathiformi-cylindrica gracilior, limbus ſexpartitus ſubæqualis vel æqualis. *Filam.* tubo adnata à fauce libera. *Stigmata* 3, gracilia, bifida. *Capſula* rigido-coriacea. *Sem.* plurima oblongiuſcula. *Gawler.*

OBS. *Ex alis foliorum ſæpiſſime bulbifera.* Radix *tuber fibroſo-tunicatum.* Scapus *ſtrictiſſimus, nec raro ſubligneus.* Folia *enſiformia, utrinque attenuata, glabra, ſæpe lucida.* Spathæ *ſurſum ſphacelatæ et ſæpiſſime coloratæ.* Faux *limbo modo pluries brevior, modo pluries longior, modo æqualis.* Limbi *laciniæ regulari-patentes vel ſubbilabiato-patentes, latitudine æquales vel paulo inæquales, longitudine ſemper æquales.* Capſula *ex trigono cylindrica, utrinque attenuata, coriacea, rigida.* Seminis *integumentum nucleo multo majus, albeſcens, opacum, in marginem inæqualem compreſſum.* Semina *haud raro Pini ſylveſtris ſemina aliquantulo referentia.* Gawler.

In ſpeciebus quibus faux brevisſima margo ſeminis obſoleta, nucleus quam in Gladiolo major. G.

Specific Character and Synonyms.

WATSONIA *roſeo-alba*; corolla regulari: tubo ſpatha fauce limbove duplo longiore: laciniis æqualibus explanatis acuminatis, antheris faucem æquantibus. *G.*

GLADIOLUS roſeo-albus. *Hort. Schoenb.* 1. *p.* 7. *t.* 13.

The leaves of this ſpecies are linear-enſiform, ſmooth, ſhorter than the ſtem, and ſomewhat twiſted at the baſe. Scape rather flexuoſe, with two or three ancipital ſpathe-like leaves and, as far as we have hitherto ſeen, ſimple; but, as Mr. GAWLER obſerves

obſerves that all the plants of this order which have ſpathaceous cauline leaves are ſubject to branch, it may probably be ſometimes polyſtachious. Spathes green, ſphacelate towards the point, keeled, and much ſhorter than the tube. Corolla about three inches long. Tube twice as long as the throat, into which it gradually widens, and is joined by a geniculate curvature. Segments horizontally ſpreading, equal, acuminate, as long as the throat, margins of the alternate ones ſlightly revolute. Stamens cloſely accumbent, equal to the throat. Anthers deep blue. Style projecting nearly equal to the ſegments. The bulb is ſmaller than in many of its congeners and roundiſh.

The length of the tube, relative to the faux, is the permanent ſpecific diſtinction; for although JACQUIN deſcribes the ſegments, tube, and faux, as of equal length, his own figure ſhews his miſtake. As ſome authors ſpeak of theſe flowers having a double tube, it may not be amiſs to mention here, that, in Mr. GAWLER's deſcriptions, that part only to which the filaments are joined, is called tube, where theſe become free the faux begins, and extends to the baſe of the ſegments of the limb.

Our figure was drawn laſt July from a plant at Meſſrs. GRIMWOOD and WYKES's, who imported it ſome time ſince from the Cape. Mr. Alderman HIBBERT poſſeſſes a variety with deep purple flowers, but with the mouth always of a deeper colour in the inſide.

All the WATSONIAS flower late in the Summer, or in Autumn.

Beſides the WATSONIA *aletroides* and *roſeo-alba*, the following liſt, with others not yet deſcribed, will rank under this genus, as above defined:

IXIA *marginata. Ait. Kew.*

GLADIOLUS *iridifolius. Willd.* but not his ſynonym of GLADIOLUS *cardinalis. Schneeve.*

GLADIOLI *iridifolii varietas. Jacq. Ic. rar.*

GLADIOLUS *laccatus. Id.*

ANTHOLYZA *meriana. Linn.*

ANTHOLYZÆ *merianæ varietas.*

WATSONIA *humilis. Miller.*



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GLADIOLUS UNDULATUS, *var.* β. WAVED-FLOWERED GLADIOLUS, or CORN-FLAG.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Spathæ valvula exterior lanceolata, concava, integerrima. *Cor* tubulosa: limbus 6-partitus. *Stamina* adscendentia: antheræ parallelæ. *Stigmata* 3, sursum dilatata, complicata, demum canaliculato-explicata. *Capsula* ovata, oblonga, subtrigona, lenta. *Sem.* numerosa. *Gawler inedit.*

OBS. Radix *tuber fibroso-tunicatum subrotundum.* Folia *multimodis ensiformia.* Scapus *laxulus, teres, modo triqueter et alatus.* Tubus *filiformis cylindricus, modo brevissimus, modo longior, vel etiam in faucem cylindricam productus.* Limbus *sæpissime inæqualis, modo subæqualis, raro æqualis, infundibuliformi—vel campanulato—vel divaricato-ringens, rarius hypocrateriformi-regularis.* Capsula *ovato-oblonga, obsoletè triquetra, membranacea, tenuissima.* Seminis *integumentum exterius maximum, membranaceum, tenue, pellucidum, spadiceum, in marginem subæqualem latissimam compresso-ampliatam.* Nucleus *parvus, subrotundus.* G.

In GLAD. communi *(nec in* G. byzantino *etsi pro varietate habito) semina pauciora, nucleus major integumentum implens, margo obsoleta. In* GLAD. Cunonia *scapus strictus, crassus, tuber nudum.* G.

Specific Character and Synonyms.

GLADIOLUS *undulatus;* corolla erecta infundibuliformi: laciniis undulatis obtusis, superioribus ovato-oblongis, summa majore: inferioribus duplo minoribus æqualibus subrecurvis. *Gawler.*

GLADIOLUS *augustus (angustus ?). Thunb. Diss.* 19. 21. *prod.* 8.

(α) GLADIOLUS *undulatus. Jacq. coll.* 256. *Ic. rar. t.* 251. *Willd. Sp. Pl. v.* 1. *p.* 218. *Nec Linnæi.*

GLADIOLUS *striatus. Andr. Bot. Rep.* 91. *ejusque Recens. Gladiolus undulatus.*

(β) GLADIOLUS *undulatus,* corolla roseo-alba, lucida: laciniis infimis fascia atrosanguinea percursis. G.

GLADIOLUS, foliis ensiformibus floribus alternis patentibus. *Mill. ic.* 198. *t.* 292. *f.* 2.

GLADIOLUS *undulatus. Schneev. & Geuns. Ic.* 19.

This beautiful GLADIOLUS is without scent. Stem from eight inches to a foot high, sometimes simple, sometimes branched.

branched. Outer leaf longeſt, ſubfalcate, ſtrongly nerved. The tube ſhorter, equal to, or longer than the ſpathe.

This is not the GLADIOLUS *undulatus* of LINNÆUS, as any one may be ſatisfied who will attend to the obſervations on this and GLADIOLUS *recurvus* in the Mantiſſa, where the tube is deſcribed to be filiform, lax, and pendulous; the ſegments of the corolla ſomewhat equal and acuminate; the ſtem a foot and half high. This deſcription, which, by no means applies to our plant, correſponds very well with GLADIOLUS *cuſpidatus* of JACQUIN, the ſegments of which are alſo more decidedly and conſtantly undulated. However, as it has been already three times figured, and is known to Botaniſts in general by the preſent title, which agrees well enough with it, as does the name of *cuſpidatus* with the real *undulatus*, we retain it, as moſt likely to prevent confuſion. GLADIOLUS *undulatus* of LOUREIRO *Cochin*, 36. having a "four-parted laciniate nec-" tary," can ſcarcely be of this genus, although made a variety of LINNÆUS's plant by him and Profeſſor MARTIN. MILLER received a bulb of our plant from the Gardener VANHAZEN of Leyden, who had raiſed it from Cape ſeeds. For its culture, ſee 539.

The generic eſſential character above given will be found to contain a very natural family, excluding none of the ſpecies already known, but ſuch as will rank under *Watſonia*, *Antholyza*, *Babiana**, or one or other of the ſubdiviſions of IXIA, excepting only GLADIOLUS *gramineus*, which is a completely diſtinct genus.

The following are the ſpecies already deſcribed, and many others are to be met with in our gardens:

GLADIOLUS *watſonius*; *abbreviatus*, And. Bot. rep. 166.——*triſtis*; *verſicolor*;——*gracilis*; *hyalinus*; *carinatus*;——*brevifolius*; *flexuoſus*;——*merianellus*; *birſutus*;——*communis*; *byzantinus*, Miller: *cardinalis*, Schneev. Curtis:——*floribundus*; *undulatus*; *anguſtus*;——*blandus* (*albidus*, Jacq.); *carneus*; *cuſpidatus*;——*alatus*; *alatus*, Andrews, t. 8. *galeatus*, Andrews, 122; *viridis*, Hort. Kew. add.——*tenellus*;——*ſetifolius*.

In the above liſt, thoſe which are not ſeparated by a line, are nearly allied: ſuch as are not followed by a citation, are in WILLDENOW's edition of *Spec. Plant.*

* See 539.

W. Curtis S. Geo. Crescent Nov 1. 1801 F. Sansom sculp

IXIA CONICA. ORANGE-COLOURED IXIA.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Cor. 6-partita patens æqualis. *Stigma* 3, erectiuſcula patula. *Sem.* ſubrotunda plurima.

Specific Character and Synonyms.

IXIA *conica*, ſcapo ſimplici, limbo patentiſſimo, filamentis coarctato-erectis antheris patentibus triplo brevioribus, ſtigmatibus non ultra baſin antherarum diviſis. *Gawler.*

IXIA *conica. Saliſb. prod. Hort.* 36. *Martin Mill. Dict. a.* 47.

IXIA *maculata*, var. flava apicibus purpureis. *Thunb. Diſſ.* 19. *Willd. Sp. Pl.* 1. 205.

IXIA *maculata. L. Mant.* 20? *Burman, fl. Capenſ. Ait. Kew.* 1. 60.

IXIA *Milleri. Berg. fl. Cap.* 8. quoad deſcriptionem ſed *fig.* 1. non *fig.* 2. *Milleri.*

IXIA *capitata. Andr. Bot. Repoſ.* 50. Ejuſque Recenſionis. IXIA *maculata.*

IXIA foliis gladiolatis glabris, floribus corymboſis terminalibus. *Mill. Icon.* 156. *f.* 1.

SISYRINCHIUM *africanum*, majus flore luteo macula notato. *Oldenland. Afr.* 32.

DESCR. Spike broad-thyrſiform; rachis flexuoſe, 1—8 flowered; ſpathe membranaceous; outer valve broad-ovate, inner one narrower, bifid, both ſhorter than the tube, and this 1—3 times ſhorter than the limb, which is horizontally patent; ſegments oblong-oval, firm, the outer ones ſomewhat broadeſt and more obtuſe, generally ſuffuſed on the outſide towards the points with crimſon, when folded up (which they are upon every ſlight obnubilation of the ſun) they form a narrow-pointed and

and ſomewhat angular cone with a hypocrateriform baſe, in which ſtate this ſpecies is very diſtinguiſhable from its congeners. It varies with deep orange and with ſtraw-coloured flowers from one to two inches in diameter, ſtain more or leſs variegated by its ſix-rayed ſtar. Leaves four or five, graſs-like, about half the length of the ſcape, which is from ſix inches to two feet high; ſcentleſs; expands only when the weather is clear, warm, and ſtill. Dried, it preſerves its brilliancy unimpaired, and is a great ornament to the herbarium. Flowers in May.

This appears to be a very common plant at the Cape, as every importation of bulbs from thence contains a conſiderable proportion of it, and ſome arrivals have conſiſted of little elſe. Perhaps it may be the plant firſt deſcribed by LINNÆUS in the Mantiſſa, by the name of IXIA *maculata*; but as that is ſaid to differ from IXIA *erecta* only in having a ſtain at the baſis of the corolla, we reſerve this name for the ſpecies anſwering beſt to this deſcription, eſpecially as we cannot trace our plant in any one of the thirty-eight varieties of *maculata* figured in Hortus Schoenbrunnenſis, among which ſeveral diſtinct ſpecies appear to us to have been blended.

Mr. SALISBURY gave it the name of *conica*, from the above-mentioned peculiar appearance of the flower when cloſed. Profeſſor MARTIN, as we judge by his calling the colour a deep red, did not underſtand the ſpecies this author was deſcribing, being miſled probably by the word *miniata*, as we confeſs ourſelves to have been, when we propoſed this as a doubtful ſynonym of IXIA *patens*.

It was cultivated from Cape ſeeds, by MILLER, in 1757; but his figure is full of botanical errors.

Our acquaintance with that portion of the vegetable kingdom included in JUSSIEU's natural order of *Irides* (the *Enſatæ* of LINNÆUS) has of late advanced with rapid ſtrides, and new ſubjects continually offering themſelves for proper arrangement, the neceſſity of a reform in the preſent conſtituent genera of this order is felt by every Botaniſt. We had entertained hopes of being no longer under the neceſſity of adopting an eſſential character ſo vague and indeterminate as the one annexed; but unfortunately this reform is attended with much difficulty; the regularity or irregularity, the curvature or ſtraightneſs, the equality or inequality of the corolla in this tribe, although hitherto uſed as the foundation of genera, being never to be depended upon for ſolid, eſſential (and ſometimes ſcarcely for ſpecific) diſtinctions: ſo that, notwithſtanding the pains he has taken, our friend, Mr. GAWLER, has not been as yet able to reduce this genus to its proper

ſtandard, and thinks it beſt for the preſent only to divide it into ſeveral ſections, diſtinguiſhed from each other by characteriſtical marks, with notices of ſuch as appear to him moſt likely to become the foundations of future ſeparate genera. With theſe obſervations we hope ſoon to have an opportunity of treating our botanical readers. In the mean time, there is one diviſion, the ſpecies compoſing which are at preſent diſperſed in the three genera of IXIA, GLADIOLUS, and ANTHOLYZA, ſo very diſtinct at firſt ſight from the reſt, by their ſmooth ſheathing petioles, terminated in general by a plicate and villoſe leaf, with their bulbs ſituated unuſually deep in the earth, that Mr. GAWLER has with the greateſt propriety united theſe into a ſeparate genus, with the name of BABIANA. They are called by the Dutch at the Cape, *Babianer*, from the circumſtance of their bulbs being a favourite food of the baboons. This genus will contain, beſides ſeveral hitherto undeſcribed ſpecies, IXIA *villoſa*, Hort. Kew. IXIA *villoſa*, Jacq. IXIA *punicea*, Jacq. IXIA *rubro-cyanea*, Jacq. et Bot. Mag. GLADIOLUS *ſtrictus*, Hort. Kew. GLADIOLUS *plicatus*, Thunb. et Linn. GLADIOLUS *ſulphureus*, Jacq. GLADIOLUS *ſambucinus*, Hort. Schoenb. GLADIOLUS *fragrans*, Hort. Schoenb. GLADIOLUS *mucronatus*, Jacq. GLADIOLUS *ſpathaceus*, Thunb. GLADIOLUS *tubiflorus*, Linn. GLADIOLUS *tubatus*, Jacq. GLADIOLUS *criſpus*, Thunb. ANTHOLYZA *ringens*, Linn. ANTHOLYZA *plicata*, Thunb.

IXIA, GLADIOLUS, ANTHOLYZA, WATSONIA, and BABIANA, all require a ſimilar treatment; that is, merely to be kept from being frozen, or too much chilled, as they frequently are in a pit, in a roomy light greenhouſe, into which plenty of air can be admitted, and to be planted in ſmalliſh pots with the black mould taken from the ſurface of heaths, well rotted and thoroughly mixed with a ſmall quantity of loam. No artificial heat muſt be uſed, except in very hard weather. Little water muſt be given in the Winter for fear of rotting the bulbs, but abundance in the Spring and Summer. Upon the decay of the leaves the bulbs ſhould be taken up, carefully dried, and replanted in September or October.

MESEMBRYANTHEMUM POMERIDIANUM. GREAT YELLOW-FLOWERED FIG-MARIGOLD.

Class and Order.

ICOSANDRIA PENTAGYNIA.

Generic Character.

Cal. 5-fidus. *Petala* numerosa linearia. *Capſ.* carnosa, infera, polyſperma.

Specific Character and Synonyms.

MESEMBRYANTHEMUM *pomeridianum;* foliis planiuſculis lato-lanceolatis lævibus ſubciliatis diſtinctis, caule pedunculis germinibuſque hirtis. *Sp. Pl.* 698. *Jacquin Icon. rar. v.* 2. 489. *Ait. Hort. Kew.* 2. 194. *Martin Miller's Dict. n.* 66. *Linn. Dec.* 1. *tab.* 13.

MESEMBRYANTHEMUM *glabrum; And.* 57. an hujus varietas nana?

This is certainly the MESEMBRYANTHEMUM *pomeridianum* of LINNÆUS, both accurately deſcribed and figured by the younger LINNÆUS. The MESEMBRYANTHEMUM *helianthoides* of the Kew Catalogue we ſhould be tempted to put down as a mere variety of this; but obſerving that both ſorts were introduced by Mr. MASSON from the Cape the ſame year, we are unwilling to ſuppoſe that, in ſo accurate a work, two ſpecies ſhould be made of one when both could be compared together.

It has uſually twelve ſtigmas and as many cells in the capſule; the peduncles and baſe of the calyx are always hairy; the ſegments of the calyx irregular, three of them flat and uſually longer than the petals, and two rounded in the middle with membranaceous appendages at the baſe.

It is a tender annual; but if raiſed in a hot bed in April or May, the young plants may be ſet out in the open border by the middle of June, where they will thrive much better than when confined in a pot. They produce a great number of flowers, which when expanded, as they always are in the afternoon if the ſun ſhine, are very ſhewy; and as they ſeed freely, they are eaſily propagated.

Our figure was taken in the Botanic Garden at Brompton early in July laſt.—Introduced to the Royal Garden at Kew, by Mr. MASSON, 1774. *Ait. Kew.*

S Edwards del

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N.º 541

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IXIA GRANDIFLORA. VELVET-FLOWERED IXIA.

Claſs and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Cor. 6-partita patens æqualis. *Stigm.* 3 erectiuſcula patula. *Sem.* ſubrotunda plurima.

Specific Character and Synonyms.

IXIA *grandiflora;* foliis ſubtiliter ſtriatis, ſpathis ariſtato-laceris, tubo brevi: laciniis ſtellato-patentibus oblongo-cuneatis apice rotundatis, ſtaminibus lateralibus. *Gawl.*
IXIA grandiflora. *De la Roche Diſſ. p.* 23. *Houtt. Nat. Hiſt. p.* 17. *pl.* 77. *f.* 3. *Linn. Pſl. Syſt.* 11. 37. *t.* 77. *f.* 3. *Saliſb. Prod. Hort.* 37. 26.
IXIA bulbifera (α) flore purpureo. *Thunb. Diſſ.* 16, 17.
IXIA ariſtata. *Hort. Kew.* 1. *p.* 57. *Willd. Sp. Pl.* 1. 203. *And. Bot. Rep. t.* 87. *ejuſque Recenſ.*—(nec vero Thunb.)
IXIA uniflora. *Mant.* 27. *Herb. Linn. Jacq. Coll.* 4. *p.* 181. *ic. rar.* 2. *t.* 283.
IXIA holoſericea. *Jacq. Hort. Schoenb. v.* 1. *cum* 3 *var.*
IXIA foliis gladiatis glabris, caule uniflora. *Mill. ic.* 237. *fig* 3. *cum* 2 *aliis var.*
SISYRINCHIUM æthiopicum majus. *Comm. Hort. Am. v.* 1. *t.* 42. *p.* 83. Anne ſpecies diſtincta?

DESCR. *Bulb* ovate, about the ſize of a hazel nut, covered with a white ſilky fibrous tunic, baſe umbilicated. *Leaves* from five to eight, enſiform, ſhorter than the ſcape, diſtich, outer ones gradually ſhorter. *Scape* from ſix inches to a foot long, thickiſh, ſtiff, and nearly of equal thickneſs. *Rachis* very flexuoſe. *Spathe* membranous, light brown with dark edges, more or leſs torn into irregular awn-like jags, according to the time it has been in flower (for, if not at firſt, it is ſure to be ſo ſooner or later). *Flowers* from one to five, never more, large, ſhewy. *Tube* ſhort, nearly the length of the

the ſpathe. *Segments* ſeveral times longer than the tube, ſometimes ending with a ſmall point more or leſs obſolete. *Branches*, when any, one or two flowered. *Parts of Fructification* lateral (i. e. inclined to one ſide without being aſcendent). *Stamens* diverging, whitiſh. *Stigmas* large, exceeding the anthers, recurved, complicate, ciliate. *Stem-Bulbs* one or two, ſlender, oblong, from the axils of the inner root-leaves.

It varies with violet, white, blueiſh, purple, and ſtriped flowers, alſo with flowers white on the inſide and purple without, with a ſtar at the baſe. This laſt is the SISYRINCHIUM of COMMELIN, above quoted, and being much taller, with longer ſlenderer leaves, may be a diſtinct ſpecies; but this with *grandiflora*, *bulbifera*, and what is, perhaps, a variety of this, *lacera* of the Linnean Herbarium, are ſo nearly allied, that it is difficult to define their differences. All of them are ſcentleſs.

This being the IXIA *ariſtata* of *Hort. Kew.* it was deſirable to have retained a name eſtabliſhed upon ſuch authority; but as it was ſo called, under the ſuppoſition of being the *ariſtata* of THUNBERG, which it is not, we ſhould by ſo doing, only perpetuate a miſtake; and when we come to give a figure of the true *ariſtata* of THUNBERG, as we hope to do, we ſhould be obliged to find a new name for that, and thus increaſe the confuſion we wiſh to diſpel; we feel ourſelves, therefore, at liberty to adopt one of the names by which it has been already deſcribed: the one we have choſen has the right of priority, and is at the ſame time ſufficiently characteriſtic. DE LA ROCHE publiſhed his deſcription of it at Leyden in 1766, and it has been ſince figured under the name of IXIA *grandiflora*, by HOUTTUYN, in two works.

The IXIA *ariſtata* of THUNBERG has a reticulated bulb, linear five-nerved leaves, with a prominent mid-rib and thickened margin; from five to nine flowers of a pale fleſh colour, one-ranked, on a rachis ſcarcely flexuoſe; ſpathe ſubmembranous, awn-toothed *(not torn)*. *Vide Thunb. Diſſ.*

Our plant is the purple variety of THUNBERG'S IXIA *bulbifera* (α) but his yellow variety (γ) which is now deemed a diſtinct ſpecies, is more conſtantly and conſpicuouſly bulbiferous, having frequently ſeveral bulbs at the joint of the ſtem as well as in the axils of the lower leaves; for this, therefore, the trivial name of *bulbifera* is properly reſerved.

For the proper culture, ſee p. 539. It is propagated eaſily by ſeeds and bulbs. Flowers in May. Was introduced into the Kew Garden in 1758.



S.t Edwards del. Pub.d by W.m Curtis, S.t Geo. Crescent, Dec.r 1.1801. F. Sansom sculp.t

IXIA SCILLARIS, *var.* LATIFOLIA (α). SQUILL-FLOWERED IXIA.—*Broad-Leaved Variety.*

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Cor. 6-partita patens æqualis. *Stigma* 3 erectiuſcula patula. *Sem.* ſubrotunda plurima.

Specific Character and Synonyms.

IXIA *ſcillaris*; corollæ laciniis obtuſiſſimis, antheris breviſſimis ſulcato-didymis capitato-conniventibus, ſtigmatibus infundibuliformibus hiantibus infra antheras recurvatis. *Gawler.*

IXIA ſcillaris. *Linn. Sp. Pl.* 52, *ejuſque Herbarii. Hort. Kew.* 1. 59. *Burm. Prod.* 1. *Houtt. Nat. Hiſt. v.* 12. *t.* 77. *Houtt. Linn. Pſt. Syſt. v.* 11. *p.* 33. *t.* 77. *f.* 2. Nec vero Thunbergii.

IXIA pentandra. *Linn. Fil. Suppl.* 92. *Thunb. Diſſ.* 18. 22. *Prod.* 10. *Syſt. Veg. Murr.* 85. *Willd. Sp. Pl. v.* 1. *p.* 207.

IXIA retuſa. *Saliſb. Prod. Hort.* 35. 11. *Mart. Mill. Dict. n.* 44.

(α) *latifolia.* Spica elongata, corollæ tubo ſpatham brevem ſubæquante: laciniis reflexis, foliis latere exciſis *(ſæpiſſime ſubundulatis)* ſcapo 3-4-plo brevioribus. G.

IXIÆ polyſtachiæ var. *Jacq. Coll. Suppl.* 159. *tab.* 2. *f.* 1.

IXIA reflexa. *And. Bot. Rep. t.* 14, *ejuſque Recenſ.* IXIA rotata—*Calyx herbacea* 5-*fida*, *flores pedicellati*, *folia integerrima ſunt pictoris errores.*

(β) *anguſtifolia.* Floribus minoribus, tubo capillari ſpatha duplo longiore laciniis patentibus *(modo retuſis)* æquali, foliis ſubexciſis longioribus. G.

IXIA polyſtachia, *Jacq. Coll.* 3. 269. *Ic. Rar.* 2. *t.* 275. *Gmel. Syſt. Nat. p.* 110. *And. Bot. Rep. t.* 128. *ejuſque Recenſ.*

DESCR. *Bulb* ſcarcely bigger than a pea, round, covered with a dark brown ſmooth tunic. *Stem* from a foot to a foot and a half high, ſimple or with one or two branches. The ſpike of this variety has from ten to twenty flowers, ſomewhat remote, eſpecially towards its baſe. *Leaves* 3–4.

Calyx

Calyx ſhort, outer valve three, inner two-toothed. *Corollas* ſometimes with ſo ſhort a tube that they appear to be *rotate: Segments* ſomewhat unguiculate, obovate, concave, and ultimately reflexed to the very ſtem, though previouſly only partially ſo, perhaps one, then two, which at that time gives it the appearance of having irregular corollas. *Stamens* ſhort, upright. *Piſtil* ſhorter. *Anthers* very ſmall, oblong, or ovate, approaching each other ſo as to form a kind of head. *Stigmas* ciliate.—It is very apt to have the tops of its leaves withered before it flowers. Varies with purple, roſe, pink, and whitiſh corollas. All ſcentleſs, though JACQUIN deſcribes the narrow-leaved one as ſweet; this blows much later and is probably a diſtinct ſpecies.

This is certainly LINNÆUS's plant, and received its trivial name from a ſuppoſed reſemblance to SCILLA *amæna*, a proof that he deſcribed from a dried ſubject, in which ſtate it certainly affords different ideas of reſemblance, than when ſeen in a living one, eſpecially in colour, which then becomes nearly violet; but is diſtinct from the I. *ſcillaris* of THUNBERG, that being nearly allied to I. *ſecunda*. What is uſually called *ſcillaris* by the Nurſerymen is IXIA *exciſa*, which reſembles our plant in the leaf, but is a completely different ſpecies.

This article, for which, as well as the preceding, we are entirely indebted to Mr. GAWLER, will, we hope, be the means of putting an end to the errors and confuſion this ſpecies has cauſed among Botaniſts. The Synonyms are ſo arranged as to ſhew its hiſtory and clear up the blunders. THUNBERG ſuſpected LINNÆUS's *ſcillaris* was his *ſecunda*, a ſpecies, perhaps, the moſt diſtant from it of the whole genus. He obſerves of our plant, that it now and then, though rarely, has four ſtamens and four ſtigmas, and ſometimes five, to which he might have alſo added ſix; but this is a luxuriancy well known to all cultivators of this genus not to be at all uncommon in moſt of the ſpecies; to which redundancy of the parts of fructification, a proportionate one of the ſegments of the corolla is often added; but ſurely this cannot juſtify his adopting the trivial name of *pentandra*, eſpecially as he allows its having five ſtamens to happen very rarely. IXIA *crocata* ſometimes occurs with twelve ſegments, ſix ſtamens, ſix ſtigmas, and IXIA *falcata* with nine ſegments, ſix ſtamens, ſtyles, and ſtigmas.

It is eaſily propagated by ſeeds and offsets; flowers as early as January. Was introduced into the Kew Garden by Mr. MASSON in 1787.



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EPIDENDRUM CUCULLATUM. HOODED EPIDENDRUM.

****

Class and Order.

GYNANDRIA DIANDRIA.

Generic Character.

Nectarium turbinatum, obliquum reflexum.

Specific Character and Synonyms.

EPIDENDRUM *cucullatum*; foliis subulatis, scapo unifloro, nectarii labio ovato ciliato acuminato, petalis elongatis. *Spec. Pl.* 1350.

HELLEBORINE floribus albis cucullatis. *Plum. Spec.* 9. *Icon.* 179. *f.* 1.

This very curious species of EPIDENDRUM, which we believe flowered for the first time in this country* in the bark stove of EDWARD WOODFORD, Esq. Vauxhall, in September last, rises with a single stem, clothed with two or three alternate ash-coloured scale-like spathes, so closely adpressed as to be scarcely discernible. From the top of the stem issues one leaf (perhaps, as in the figure of PLUMIER, sometimes more) fleshy, linear, acute, convex at the back, and slightly grooved in front. From the bosom of this leaf rises a round scape, at first swelling, then attenuated upwards, bearing a solitary flower, perfectly white when newly opened, but becoming tinged with a yellowish green, consisting of three external and two internal petals, of similar length and shape, linear, somewhat undulated, the two inner ones exactly opposite, and a nectary surrounding the parts of fructification shaped like a friar's cowl, far-acuminate, fringed, continuing of a snow white after the petals have changed their tint. Nearly scentless.

* It was in the royal collection at Kew in 1794. *Mart. Mill. Dict.*

In

In the ſame ſuperb collection, we had the pleaſure of ſeeing in flower, at the ſame time, the EPIDENDRUM *fragrans* of SWARTZ, ſo called from the very fine odour it diffuſes far around, a plant formerly figured in the Botanical Magazine, and there called by miſtake EPIDENDRUM *cochleatum*. Who can avoid occaſional error, eſpecially where the ſpecies are ſo numerous? Profeſſor MARTYN, in his edition of MILLER's Dictionary, enumerates one hundred and twenty-four kinds, of which but thirty were known to LINNÆUS, and only four appear in the Kew Catalogue.

Being a native of the Weſt-Indies, and naturally a paraſitical plant, its culture is difficult, and it is of neceſſity a conſtant inhabitant of the bark ſtove in our climate.

Mr. WOODFORD's head gardener, Mr. WATSON, who is a very ſucceſsful cultivator and pays great attention to the natural propenſities of plants, recommends in the management of EPIDENDRUM to protect the roots by knobs of old tan, and obſerves that, in general, they love ſhade and a hot damp air, but do not bear much water to the roots.



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ARCTOTIS ANTHEMOIDES. CHAMOMILE ARCTOTIS.

****

Class and Order.

SYNGENESIA POLYGAMIA NECESSARIA.

Generic Character.

Recept. villosum seu paleaceum. *Pappus* corona 5-phylla. *Cal.* imbricatus: squamis apice scariosis.

Specific Character and Synonyms.

ARCTOTIS *anthemoides*; radio sterili, paleis flosculos subæquantibus, seminibus basi penicillatis, foliis duplicato-pinnatifidis linearibus.

ARCTOTIS *anthemoides*; paleis flosculo brevioribus, foliis supra decompositis linearibus. *Sp. Pl.* 307. *Martyn's Miller's Dict.* 13.

CHAMÆMELUM. *Burman. Afr.* 174. *t.* 63. *f.* 2.

URSINIÆ SPEC. *Gært. fruct.* 2. 462.

DESCR. *Root* annual, fibrous. *Stem* much branched at the base; *leaves* smooth, alternate, doubly pinnatifid: *leaflets* linear, somewhat reflexed. *Peduncles* terminal, long, obsoletely channelled. *Calyx* subovate, imbricate; scales ovate, marginated, the internal ones largest. *Receptacle* chaffy and hairy, the hairs coming off attached to the seed. *Chaffs* involving the floret and nearly equal to it, persistent. *Radius* about twelve-rayed, neuter, sterile, yellow within, and purple without. *Disk* yellow, florets crowded, a little exceeding the chaffs. *Seeds* striated, incurved, with a membranous crown of five leaflets, which are white with a brown streak in the middle, and have a tuft of cottony hairs at the lower extremity.

The

The genus ARCTOTIS, as at preſent conſtituted, contains ſpecies which do not well accord with one another, nor even come under the ſame order in the Linnean ſyſtem, the preſent plant properly belonging to the order of POLYGAMIA FRUSTRANEA. ARCTOTIS *anthemoides*, *paradoxa*, and *dentata*, are, however, certainly congeners, and GÆRTNER has made an attempt to form them into a diſtinct genus, under the name of URSINIA, in which we might have been led to have followed him, but unluckily our plant wants his eſſential character of a double pappus on the crown of the ſeed. It frequently, though not generally, happens that the floret remains attached to the ſeed after this is ripe; is it poſſible that, in the examination of a dried ſpecimen, ſuch a circumſtance could have deceived this accurate Botaniſt? However this may be, our plant has certainly no ſuch double pappus, one within the other, as he has deſcribed and figured, although it has, which is very unuſual, a ſort of pappus at both ends, a membranous crown at one end, and a pencil of hairs at the other. By this laſt, the ſeed attaches itſelf to whatever it happens to touch, and by this means may be conveyed to a greater diſtance than by the help of the wind.

Though poſſeſſing no particular beauty, it is, in ſeveral reſpects, curious to the eye of a common obſerver. All the inſide of the flower is of a lively yellow colour, the outſide purple. The buds nod, but the flowers when expanded ſtand erect; as the flower decays, it again nods till the ſeeds are ripe, when it riſes upright, and the crown of the ſeed expanding at the ſame time, it very much reſembles ſome flower of another family, having a corolla of five white ſegments and a brown ſtar in the middle, not very unlike a *ſtatice*. The whole plant ſmells like Chamomile.

It is an annual, a native of the Cape of Good Hope, and thrives very well in the open border, and if brought forward by being ſown on a hot-bed in the Spring, will produce plenty of ſeeds. If kept within doors, the flowers diminiſh in ſize and loſe their purple colour. It has been cultivated at the Botanic Garden at Brompton ſince the year 1795, at which time it was firſt raiſed there from ſeeds obtained from the Cape of Good Hope.



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IXIA BULBIFERA. SULPHUR-COLOURED IXIA.

Clafs and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Cor. 6-partita patens æqualis. *Stigm.* 3 erectiuſcula patula. *Sem.* ſubrotunda plurima.

Specific Character and Synonyms.

IXIA *bulbifera*; foliis multiſtriatulis, ſpatha lacera, corolla infundibuliformi ſuperne patente: tubo brevi: laciniis ovato-oblongis, ſtaminibus lateralibus divergentibus. *Gawler.*

IXIA bulbifera. *Linn. Sp. Pl.* 51. *Syſt. Veg.* 85. *Reichard.* 1. 99. *Amæn. Acad.* 4. 300. *Hort. Kew.* 1. 57. *Willd. Sp. Pl.* 1. 204. *Bot. Repoſ.* 48. *Ejuſq. recenſ.* 8. *Burman. prod. fl. cap.* 1.

IXIA bulbifera, *var.* γ. flava. *Thunb. Diſſ.* 16.

IXIA bulbifera. *Mill. Dict. ibi enim flores ſiſtit ſulphureos; ejus ſpecimen vero apud* HERB. BANKS. *æque ac icon picta floribus gaudent albo-purpureis!*

IXIA monanthos. *De la Roche, Diſſ.* 21?

This is alſo termed by the Dutch *Vluweel Bloemje*, or *Velvet-flower*, as well as IXIA *grandiflora* of the laſt number, to which it is very cloſely allied, but generally taller, leaves paler or more tinged with yellow; ſtem bearing from one to four bulbs at each joint, which fall off when mature; corolla likened to HEMEROCALLIS in the *Amænitat. Academicæ*, ſomewhat ſmaller and narrower than in *grandiflora*; ſegments with the ſides curved

curved not ſtraight, approaching an oval not a cuneate form, points though obtuſe not ſo broadly rounded; colour light yellow. Strong plants from old bulbs generally have two branches; flowers, three to five, ſcentleſs, or, according to Mr. CURTIS, ſlightly fragrant; leaves, as in its relatives, more numerous than is general in IXIA, ſix to ten, outer ones gradually ſhorter, outermoſt ſcarcely half an inch long. DE LA ROCHE's variety is blotted and ſtreaked with brown; but if IXIA *lacera*, which we have not yet met with, be a diſtinct ſpecies, this would rather be a variety of that.

Propagates faſt by ſeeds, ſtem-bulbs, and root-bulbs, and is become one of the commoneſt ſpecies in our gardens, yet has never before been figured, except in the Botaniſt's Repoſitory. Preſerves its colour, when dried, unimpaired. Cultivated by MILLER in 1758.

It has been ſuppoſed that many remarkable varieties in this genus have been produced by the induſtry of Dutch gardeners, but this is very doubtful, for certain it is that ſcarcely a variety, or what is ſuppoſed to be ſuch, has been imported from Holland, that has not been produced alſo from bulbs that were undoubtedly gathered wild or diſcovered in ſpecimens collected at the Cape. Whenever therefore a plant affords marks of diſtinction from its congeners, exceeding thoſe alloted to variety by LINNÆUS, and is not known to have been raiſed from the ſeeds of the identical ſpecies of which it is pretended to be a variety, we, without heſitation, record it a diſtinct ſpecies: as ſtudiouſly avoiding, on the other hand, to enumerate as ſuch, thoſe that merely differ within the rules preſcribed by our great maſter. When, as in this inſtance, we are but ſlightly acquainted with the local economy and preciſe habitat, this rule requires to be ſtrictly attended to.

N. B. In the enumeration of the ſpecies of WATSONIA (ſee 537) we omitted IXIA *ſpicata (fiſtuloſa*, Bot. Mag.) and IXIA *plantaginea*, which we now propoſe for inſertion.—WATSONIA *plantaginea* will be ſhortly given.



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MONARDA DIDYMA. SCARLET MONARDA, or OSWEGO-TEA.

Clafs and Order.

DIANDRIA MONOGYNIA.

Generic Character.

Cor. inæqualis: labio fuperiore lineari filamenta infolvente. *Semina* 4.

Specific Character and Synonyms.

MONARDA *didyma*, floribus capitatis fubdidynamis, caule acutangulo. *Linn. Sp. Pl. ed.* 3. *p.* 32. *Ait. Kew. v.* 1. *p.* 36. *Mill. ic.* 183. *f.* 1.

MONARDA floribus capitatis verticillatifque, caule acute angulato, foliis lanceolato-ferratis glabris. *Buttn. cun.* 226. *Trew. Plant. Select.* 3. *t.* 64. *Zorn. icon.* 249.

Betwixt the variety of *Monarda fiſtuloſa*, figured pl. 145, of this work, and the preſent ſpecies, there is a great ſimilarity, eſpecially as that plant is coloured, the bloſſoms not inclining ſo much as they ought to the crimſon hue; for, in regard to colour, the two plants differ very materially, the flowers of the *didyma* being of a rich ſcarlet, and thoſe of the *fiſtuloſæ var.* of a fine crimſon; but the great ſpecific difference between the two conſiſts in the angles of the ſtalk, which are ſharp in the one and obtuſe in the other; the variety of the *fiſtuloſa* grows to a greater height alſo; there are many other differences which it is needleſs to particulariſe, ſuffice it to ſay, that they are both very deſirable plants, of the hardy herbaceous kind, and worthy a place in all collections.

The *didyma* ſeldom riſes to above the height of two feet, it throws out numerous ſtalks, whence it becomes buſhy; its foliage when bruiſed gives out a moſt delightful fragrance, which alone would entitle the plant to a place in every garden.

It

It is a native of North-America, from whence it was introduced by PETER COLLINSON, Esq. in 1755, flowers from June to August; prefers a moist soil, where, like some of the mints, it increases greatly by throwing out numerous shoots from its roots, by dividing and transplanting of which it is readily propagated, as well as by seeds, which it produces, though not abundantly.

The name of MONARDA was given to this genus in honour of NICHOLAS MONARDES, a Spanish Physician, of the sixteenth century, and its trivial name from this species having subdidynamous flowers, *i. e.* with four stamens, but two of them without anthers.

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PELARGONIUM QUINATUM. FIVE-FINGERED PELARGONIUM, or CRANE'S-BILL.

Class and Order.

MONADELPHIA HEPTANDRIA.

Generic Character.

Cal. 5-partitus: lacinio ſuprema deſinente in tubulum capillarem nectariferum ſecus pedunculum decurrentem. *Cor.* 5-petala irregularis. *Fil.* 10 inæqualia: quorum 3 (raro 5) caſtrata. *Fructus* 5-coccus roſtratus: roſtra ſpiralia introrſum barbata.

Specific Character and Synonyms.

PELARGONIUM *quinatum*; caule fruticoſo angulato, foliis alternis quinque-partitis: foliolis cuneatis apice tridentatis, pedunculis unifloris erectis terminalibus, calyce maximo ſtellato-patente.

GERANIUM *præmorſum. Bot. Repoſ.* 150.

This very rare and diſtinct ſpecies is but of low ſtature, at leaſt we have not yet ſeen it reach a foot in height. The ſtalk is woody at the lower part and angular; branches few, fleſhy, flexuoſe, with leaves growing alternate on footſtalks the length of the leaf, with two very ſmall green ſubulate ſtipulæ; leaves ſoft, kidney-ſhaped, divided almoſt to the footſtalk into five cuneate three-toothed ſegments, the two outer ones, as is uſual, broader than the reſt, conſiſting as it were of two united. From the very extremity of the branch grows one erect peduncle, jointed at the baſe, and having juſt below the joint generally three concave ovate bracteæ. The ſimilarity of the peduncle and bracteæ to thoſe of the umbellate ſpecies, leads to a ſuſpicion that the flower may not always be ſolitary; however,

ever, we have never as yet ſeen it bear more than one to each branch. The ſegments of the calyx are very long, ſpreading, linear-lanceolate. Corolla large, ſhewy, the two ſuperior petals erect, obovate, cream-coloured, beautifully ſtreaked from the centre with red veins, and more than double the ſize of the three lower paler veinleſs petals. Fertile ſtamens ſeven, aſcendent, with purple anthers. Stigmas five, rotate, incurved.

When a plant has obtained an eſtabliſhed name, we hold it better to retain this than to change it even for a better; but this ſpecies never having been, to our knowledge, deſcribed by any author of authority, we feel ourſelves at liberty to adopt the name of *quinatum*, which was with great propriety propoſed by Mr. GAWLER, from its leaves being divided into five ſegments or leaflets, much in the ſame manner as thoſe of *ternatum* are divided into three; the nurſeryman's name *præmorſum*, which gives a falſe idea, appearing to us totally inadmiſſible.

It is eaſily propagated by cuttings, but the tender branches ſeem very apt to periſh.

Was firſt raiſed from ſeeds procured from the Cape by Mr. QUARRELL, at the nurſery of Mr. COLVILLE, King's-Road, Chelſea, where it has been plentifully increaſed.

Our figure was taken from a ſpecimen which flowered at EDWARD WOODFORD'S, Eſq. the latter-end of May 1801.



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IXIA BICOLOR. RINGENT IXIA.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Cor. 6-partita patens æqualis. *Stigma* 3 erectiuſcula patula. *Sem.* ſubrotunda plurima.

Specific Character and Synonyms.

IXIA *bicolor*; ſpatha lacera, corolla-bilabiata anguſta: limbo tubum ſubæquante: laciniis lateralibus inferioribus minoribus convolutis ab intermediâ minus profunde partitis. *Gawler.*

GLADIOLUS bicolor. *Thunb. Diſſ.* 16. *t.* 2. *f.* 1. *prod.* 8. *Jacq. Coll. Sup.* 25. *ic. rar.* 2. *t.* 240. *Hort. Kew. add.* 481. *Willd. Sp. Pl.* 1. 216.

GLADIOLUS latifolius floribus clauſis obſoletis ad caulem villoſis. *Breyn. prod. fl. rar. p.* 2. *p.* 21. *t.* 8. *f.* 2.

GLADIOLUS villoſus. *Burm. prod. fl. cap.* 2.

Many of our readers will doubtleſs be ſurpriſed to ſee this plant ranked under IXIA, where indeed, as the eſſential character has hitherto ſtood, it can claim no admiſſion; but, while *grandiflora* and its relatives are ſuffered to remain, this cannot be excluded without giving a ſhock to natural affinity, as violent to that as uſeleſs to artificial ſyſtem, for ſo completely do this and IXIA *grandiflora* of the laſt number agree in habit, in capſule, in ſeed, and in ſpathe, that before the corolla is expanded, or after it is waſted away, they cannot be diſtinguiſhed from each other. From the irregularity of its corolla alone it has been univerſally conſidered to be a GLADIOLUS, from which genus it is however entirely excluded by the corrected eſſential character, as given by Mr. GAWLER (*vid.* 538). As this agrees with IXIA *grandiflora*, *bulbifera*, &c. ſo does GLADIOLUS *ſecurigera* of the Bot. Mag. with

IXIA

Ixia *crocata* and its relatives, and differs nearly in the ſame manner, and both muſt belong to genera, of the eſſential character of which the regularity or irregularity of the corolla can form no part. Mr. Curtis appears to have been ſenſible of the natural affinity of theſe plants, and under this impreſſion had marked the drawing of Ixia *bulbifera*, given this month, Gladiolus *ſulphureus*, and noted it as one of thoſe ſpecies which it is difficult to determine whether it belongs to that genus or to Ixia. When ſuch men as he are at a loſs to arrange the ſpecies under the genera as now conſtituted, it ſhews the neceſſity of a reform*.

For an opportunity of preſenting our readers with a figure of this very rare ſpecies, we are indebted to Edward Woodford, Eſq. of Vauxhall, from whoſe rich mine our work is adorned with many a gem.

It is omitted by Gmelin, in *Syſt. Nat.* and by Martyn, in *Mill. Dict.* Was introduced to the Kew Garden by Mr. Masson, in 1786. Flowers in March. Scentleſs. May it be a hybrid plant?

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* Convinced of theſe imperfections in the preſent arrangement, Mr. Gawler has been led to propoſe the forming a new genus, under the name of Sparaxis (*σπαραξις laceratio*) but ſenſible that "in ſo "natural an order of plants, nothing is more difficult than to find "generic characters that ſhall be ſtable and not ſet aſide by every new "ſpecies that comes in our way †:" he does not venture further at preſent than to propoſe, leaving the rejection or adoption of it to the future determination of the Botanical world.

Ess. Char. Spatha *ſcarioſo-membranacea ante defloreſcentiam lacera.* Cor. 6-*partita baſi infundibuliformi-tubuloſa.* Stigm. 3 *recurvo-patentia.* Capſ. *ſubrotunda.* Sem. *plurima rotunda.* Gawler.

Obs. *Radix tuber fibroſo-tunicatum. Caulis ſæpiſſime ex axillis foliorum bulbifera. Folia* 6—10, *enſiformia ſubtiliter multiſtriata glabra. Rachis flexuoſa. Flores pauci remoti. Genitalia erecta lateralia vel etiam adſcendentia. Tubus ſpatham ſubæquans: limbus regularis vel bilabiato-irregularis patentiſſimus vel angulatus.* Ixia pendula; *elata, ſpica elongata, multiflora, diſticha, ramis gaudet capillaribus rigidis plurimis pendulis.* G.

Under this genus will rank,

Ixia fragrans, *Willd.* Ixia bulbifera, *Willd.* & *Bot. Mag.* [Ixia grandiflora, *Bot. Mag.* Ixia lacera, *Herb. Linn.* Sisyrinchium majus latifolium, *Comm. Hort.* ſpecies ſi diſtinctæ]. Ixia tricolor, *Bot. Mag.* Ixia bicolor, *Bot. Mag.* Ixia pendula, *Willd.?*

† *Smith icon. pict.*

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JOHN SIMS, M. D.

FELLOW OF THE LINNEAN SOCIETY.

VOL. XVI.

Quelque elegante, quelque admirable, quelque diverse que soit la structure des Vegetaux, elle ne frappe pas assez un oeil ignorant pour l'interesser. Cette constante analogie, et pourtant cette variété prodigieuse, qui regne dans leur organisation, ne transport que ceux qui ont deja quelque idée du systême végétal. Les autres n'ont a l'aspect de tous ces trésors de la nature, q'une admiration stupide et monotone. Ils ne voient rien en detail, parce qu'ils ne savent pas même ce qu'il faut regarder, et ils ne voient pas non plus l'ensemble, parce qu'ils n'ont aucune idée de cette chaine de rapports et de combinaisons qui accable de ses merveilles l'etprit de l'observateur.

ROUSSEAU.

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MDCCC III.



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IXIA MACULATA, *var.* VIRIDIS (γ). GREEN-STAINED IXIA.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Spatha bivalvis. *Cor.* basi tubulosa tubus gracilis, limbus regularis *(rarissime subirregularis)* subæqualis patens. *Filam.* limbo pluries breviora erecto-patentia, vel coarctato-erecta. *Stigm.* 3, patentia. *Semina* numerosa, globosa. *Gawler.*

6-partite

OBS. *Corolla regularis quoad figuram et situm partium quoad magnitudinem modo (sed rarissime) subirregularis.* G.

Specific Character and Synonyms.

IXIA *maculata* tubo capillari, limbo ex campanulato patentissimo basi maculato, laciniis oblongiusculis, stigmatibus usque tubum divisis infra antheras recurvatis. *G.*

IXIA maculata. *Murr. Syst.* 85. *Thunb. Diss.* 19. *prod.* 10. *Burm. pr. fl. cap.* 1. *Schneev. & Geunf.* 25. *t.* 6. *Jacq. Hort. Schoenb. v.* 1. *perplurimæ varietates. Willd. Sp. Pl.* 1. 205.

IXIA spectabilis *(var. hæc.)* IXIA amæna. *Salisb. prod. hort. p.* 33, 35. *n.* 10, 12. *Mart. Mill. Dict.*

IXIÆ. *Bot. Rep. tab.* 23, 29, 159, 196. *Ejusque Recens.* IXIA amæna, maculata 2, 5. 2, 6.

IXIA *abbreviata;* floribus racemosis pistillo brevissimo. *Houtt. Linn. pfl. Syst.* 11. 48. *tab.* 78. *Nat. Hist. p.* 2. *sect.* 12. *p.* 41.

IXIA *maculata* cor. viridi spicis sæpe pedalibus. *Thunb. Diss. loc. cit. Travels, Engl. ed. v.* 2. *p.* 34. *var. hæc, ita Schneev.* 6. *Jacq. loc. cit.* 33. *Bot. Rep.* 29.

DESCR. Bulb round, compressed. Leaves ensiform and ensiformly-linear, nearly equalling or three times shorter than the scape, which is from

from a foot to four feet high, branched or ſimple, with from ſix to thirty flowers in a ſpike. Spathe membranous, three times ſhorter or nearly equalling the tube on the ſame plant, outer valve acute and entire, or blunt and toothed. Tube capillary, one to three times ſhorter than the limb, which is from campanulate patent. Segments oblong, more or leſs inclined to oval or lanceolate, inner ones narrower and more acute. Filaments from upright patent, ſhorter than the anthers, which are linear, with a ſubſagittate baſe. Scentleſs.

Found by THUNBERG flowering in October by the ſides of rivers and brooks in the Roode Zand Valley, many days journey from Cape-Town. Had we ſeen none but the large ſub-variety (if we may ſo call it) common in our gardens, we might poſſibly have been led to have conſidered our plant as a ſeparate ſpecies; but during the inſpection of ſome hundreds of ſpontaneous and garden ſpecimens, we have ſeen it in all the phaſes uſual to this changeable ſpecies; as alſo without the ſtain, which, as *erecta* differs only from *maculata* by the large ſtain at the baſe, muſt be referred to the former. It propagates freely both by ſeeds and offsets, is not very tender, never expands but in clear weather and when protected from the wind. Preſerves its beauty if carefully dried.

Although the eſſential character of IXIA, as above given, conſiderably reduces the heterogeneous maſs that has hitherto incumbered this genus, as will be ſeen by the following ſynoptic view of the ſpecies which will rank under it, we ſtill ſuſpect that ſome of the ſections muſt be hereafter ſeparated into diſtinct genera, before a completely determinate eſſential character is formed. Undeſcribed ſpecies, which are numerous in our gardens, are not inſerted. Thoſe for which no authority is cited, are as they ſtand in WILLDENOW's edition of the *Species Plantarum*.

IXIÆ SYNOPSIS. GAWLER *inedit.*

Sect. 1. *Antheris breviſſimis conniventibus; ſtigmatibus infundibuliformibus, hiantibus.*

IXIA ſcillaris *α.* *β.* (ſpecieſne diſtinctæ?)

Sect. 2. *Uni-biflora; limbo ſubgloboſo-campanulato, tubo fere nullo; bulbo carnoſo tunica tenui veſtito.*

IXIA crateroides, *Bot. Repoſ. t.* 186.

Sect. 3.

Sect. 3. *Rachide in multiflori flexuosa flexubus de flore in florem valde arcuatis; valvula exteriore spathæ integerrima obtusa tubum brevem subæquante vel longiore; floribus ex ortu secundis, pistillo stamina sæpius superante; bulbo oblongo-ovato tunica nigra putaminea margine dentato-fissa vestito, in annosis tunicis plurimis basi imbricatis.*

Ixia ciliaris, *Salisb. inedit.*—Ixia hirta.—Ixia rochensis (secunda *de la Roche*).—Ixia secunda.—Ixia ramosa (scillaris *Thunberg*).—Ixia obtusata, *Herb. Banks.*—Ixia setacea, *Thunb.*

Sect. 4. *Spica composita ex floribus sessilibus spiculisque* 1—2 *floris alternis capillaribus; bulbo ovato tunica fibrosa.*

Ixia capillaris (erecta *Jacq. collect.* nec *Hort. Schoenb.*).—Ixia lancea, *Jacq. ic. rar. et coll.* nec *Thunberg.*—Ixia aulica.—*Meræ varietates?*

Sect. 5. *Floribus paucis remotis; antheris inflexis?*

Ixia crispa.

Anne cum Gladiolo crispo, Gladiolo striato, Gladiolo pectinato, *Herb. Banks. novum fundaturum genus?*

Sect. 6. *Stigmatibus hirtis revolutis; bulbo tunica lucida putaminea superne dentata (valvuloidee sulcata?)*

Ixia excisa.

Sect. 7. *Floribus interdiu clausis vespere expandentibus per totam noctem vigilantibus; stigmatibus longioribus, capillaribus, laxis, effusis os tubi usque vel ultra; bulbo campaniformi basi truncato-plano, in annosis tunicis plurimis nigris deorsum imbricatis vestito.*

Ixia falcata.—Ixia cinnamomea.—Ixia radiata (Gladiolus recurvus, *Thunb. et Suppl.* nec vero *Linn.*).—Ixia angusta.—Ixia pilosa.

Sect. 8. *Flore magno-solitario; tubo brevi spathæ æquali; laciniis limbi obovatis; pistillo staminibus longiore.*

Ixia anemonæflora.

Sect. 9.

Sect. 9. *Tubo gracillimo ſpatha ſaltem duplo longiore; limbi laciniis patentiſſimis, oblongis, lanceolato-ovalibus, alternis paululo anguſtioribus acutioribus; bulbo ſuperne compreſſo, tunica lenta fibroſa veſtito.*

Ixia patens (leucantha v. *alba*).—Ixia flexuoſa.—Ixia conica, *Bot. Mag.*—Ixia erecta.—Ixia maculata.—Ixia columellaris, *indeſcr.*—Ixia incarnata.

Sect. 10. *Cor. hypocrateriformi; tubo limbo pluries longiore; laciniis ſubæqualibus vel unico fere duplo majore; ſtaminibus ſæpius accumbentibus; bulbo fibras exſerente bulbillos vel tubera apicibus gerentes. Genuſne diſtinctum?*

Ixia longiflora.—Gladiolus roſeus (Houttynia capenſis, *Houtt.*).

N. B. Ixiæ ariſtatæ et linearis, *ſpecimina viva vel ſiccata ſatis integra nondum vidi. Deſcriptiones nimis mancæ.*

Sparaxidis genus (vide 548) excluditur.

Errata in laſt Number.

In 546, l. antipenult, *for* this ſpecies having, &c. *read* from the juxta-poſition or twin-like appearance of the anthers in this ſpecies.

In 548, note, l. 16, *for* angulatus *read* anguſtatus.

SAMYDA ROSEA. ROSE-COLOURED SAMYDA.

Class and Order.

DECANDRIA MONOGYNIA.

Generic Character.

Cal. 5-partitus coloratus. *Cor.* 0. *Nect.* campanulatum staminiferum. *Capf.* intus baccata, 4-valvis, 1-locularis. *Sem.* nidulantia.

Specific Character and Synonyms.

SAMYDA *rofea;* floribus dodecandris aggregatis, foliis oblongis obtufiffimis fubferratis utrinque pubefcentibus.

SAMYDA *ferrulata. Bot. Repof. pl.* 202.
GUIDONIA ulmifolio flore rofeo. *Plum. Gen.* 4. ?

This beautiful flowering fhrub is a native of the Weft-Indies, and conſequently requires the heat of the bark ſtove to bring it to any perfection in this country, where it is very ornamental, producing its fine red flowers in abundance along the flexile pendent branches.

It is certainly a very diſtinct ſpecies from the SAMYDA *ferrulata* deſcribed and figured by JACQUIN, in the ſecond volume of his Collectanea, which has acute leaves finely ſerrated, and ſolitary flowers different in ſhape as well as colour. It was ſent to this country by Dr. ANDERSON, from the Botanic Garden at St. Vincent's, and has been ſome years in the very fine collection of rare exotics poſſeſſed by Mr. EVANS, at Crombie-Row, Stepney, where our drawing was taken.

By Dr. ANDERSON it was called SAMYDA *pubeſcens*, a plant apparently unknown to Botaniſts of our day, and as the ſynonyms quoted by LINNÆUS (which certainly have no affinity with this) are referred to other plants by Profeſſor SWARTZ; we were inclined to ſuppoſe that he might be right, but Dr. J. E. SMITH having kindly examined the Linnean Herbarium, informs us, that there is no ſpecimen ſimilar to our drawing there, and, from a critical examination of the whole genus, is inclined to believe that it is the GUIDONIA *ulmi folio flore roſeo* of PLUMIER, which LINNÆUS appears to have confounded with the GUIDONIA *ulmi folio flore niveo* of the ſame author, his SAMYDA *ferrulata*.



Edwards del. Pub by W Curtis St George Crescent. Feb 1 1902. F Sansom

CAMPANULA AZUREA. AZURE CAMPANULA.

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cor. campanulata, fundo clauſo valvis ſtaminiferis. *Stigm.* 3-fidum. *Capſ.* infera poris lateralibus dehiſcens.

Specific Character.

CAMPANULA *azurea;* foliis ovato-oblongis ſeſſilibus ſerratis [utrinque piloſis] caule ſimplici angulato floribus paniculatis. *Banks Mſſ.*

DESCR. Stalk erect, ſimple, quadrangular, with raiſed ſubcartilagineous angles. Radical leaves few, petiolated, cordate-ovate, ſerrated, ſomewhat hairy underneath, hairs few, thinly ſcattered, more about the margin than elſewhere. Cauline leaves alternate, ſeſſile, oblong-ovate, acute, ſerrate, thinly haired. Peduncles panicled, long, filiform alternate, axillary, and once or twice divided; pedicels nodding with linear bractes. Calyx pentagonal. Segments ſubulate-filiform, more than half the length of the corolla. Segments of the corolla ſemiovate, acute.

We found conſiderable difficulty in determining this ſpecies, till we fortunately found in the Bankſian Herbarium a ſpecimen in every reſpect correſponding with the one from which our drawing was made, by which we found that it had been regarded by the late Dr. SOLANDER as a nondeſcript ſpecies, and had been named by him CAMPANULA *azurea*, and diſtinguiſhed by the ſpecific character above given. In both ſpecimens the leaves are ſmooth on the upper ſide, and have very thinly ſcattered hairs on the under ſide; on which account we have encloſed the words *utrinque piloſis* between crotchets. In many reſpects it reſembles lilifolia, but differs in its angular ſtalk, in the length of its calyx, and, as we believe, has very diſſimilar roots. Was ſent with other plants from Switzerland to Mr. SWAINSON, by whom it was communicated to Mr. SALISBURY at the Botanic Garden, Brompton, where our drawing was made laſt. The ſpecimen in the Herbarium flowered in the Botanic Garden at Chelſea in 1778, and is marked as a native of Switzerland. It is a hardy perennial, and, as an ornamental flower, worthy of culture.



Edwards del Pub by W. Curtis St. Geo. Crescent Feb 1 1802. F.S.A.

N. scutifolia

NYMPHÆA CÆRULEA. BLUE WATER-LILY.

Class and Order.

POLYANDRIA MONOGYNIA.

Generic Character.

Cor. polypetala. *Cal.* 4—5-phyllus. *Bacca* multilocularis, loculis polyſpermis.

Specific Character and Synonyms.

NYMPHÆA *cærulea*; foliis peltatis inferne bilobis obtuſe dentato-ſinuatis utrinque glabris. *Dryand. inedit.*

NYMPHÆA *cærulea. Bot. Repoſ.* 197.

" A native of the Cape of Good Hope. Calyx four-leaved. " Petals twenty in three ranks. Stigmas twenty. I do not " know if the blue-flowered Eaſt-India one be the ſame; " the leaves ſeem to be entire, and the flowers ſmaller with " acute petals.—N. B. I have ſince had it with entire leaves." *Dryand. Mſſ.*

We are proud to have it in our power to offer any thing not before communicated from ſuch a ſource as Dr. DRYANDER. The ſketches of a maſter's hand are of more value than the finiſhed labours of other men. The leaves are truly peltate, though divided to within half an inch of the footſtalk into two lobes, which terminate in a curved point a little divaricate, ſo as to give it a ſomewhat ſagittate appearance. In this form of the lobes it differs from NYMPHÆA *lotus*, as well as that in the latter the margin of the leaf is acutely dentated and tomentoſe on the under ſide. But there are probably ſeveral ſpecies as yet undeſcribed. This is certainly one of the moſt beautiful of aquatic plants, and appears to be more eaſily cultivated than moſt of them, flowering readily, and continuing to bloſſom through great part of the Summer. It has the additional recommendation of being very fragrant. Is uſually kept in the ſtove planted in a pot of loamy earth, and immerſed under water in the ciſtern, but would perhaps ſucceed as well in a good greenhouſe. Our drawing was made from a ſpecimen that flowered laſt May in the collection of the Right Hon. CHARLES GREVILLE, at Paddington, and is to be met with in ſeveral collections in the neighbourhood of the metropolis.



S.E.Edwards del. Pub.d by W.Curtis, S.t George's Hill Lambeth Feb.y 1.st 1807. J.Swan sc.t



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WATSONIA PLANTAGINEA. SMALL-FLOWERED WATSONIA.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Vide No. 537.

OBS. ULTER. *Subinde vivipara. Caulis rariſſime anceps. Stamina ſæpius adſcendentia antheris parallelis (æqua fronte digeſtis) in nonnullis vero ereƈta ſtylum ſupra trifariam ſtipantibus bis quoque foliorum margines cartilaginei, faux brevior turbinatocontraƈta, ſemina vix alata, nec inde genere eliminandis, cæteris prorſus conſentaneis. Bulbus intra tunicam geminos conſimiles, unicum e ſcapo pertranſeunte diſiſſum ſimulantes, quotannis enititur, biſque jam adoletis perit. Radicationis habitum in Ixia et Gladiolo, ab eodem in Watſonia aliquantulum diſcrepantem, alibi proferemus.* Gawler.

Specific Character and Synonyms.

WATSONIA *plantaginea*; foliis lineari-enſiformibus ſtriƈtis infimo falcato, compreſſo-fiſtuloſo: cæteris plano-ſolidis, caule alato-ancipiti, ſpica diſticha ſubamentiformi, limbo æquali campanulato-patente. *G.*

IXIA plantaginea. *Hort. Kew.* 159. *Willd. Sp. Pl.* 1. 200.

IXIA triticea. *Burm. prod. ſt. cap.* 1.

GLADIOLUS alopecuroides. *Thunb. Diſſ.* 14. *prod.* 8. *Sp. Pl.* 54. *Amæn. Acad.* 4. 301. *Syſt. Veg. Murr.* 86. *Gmel. Syſt. Nat.* 111.

PHALANGIUM ſpicatum. *Linn. Pſt. Syſt. II. p.* 129. *t.* 8. *f.* 2.

PLANTA æthiopica, alato caule fruƈtum capſularem grani tritici æmulum in longa ſpadicea proferens. *Pluk. Am.* 173. *t.* 439. *f.* 3.

DESCR. Scape ancipital, 1—2 feet high. Leaves three, alternate, enſiform, ſomewhat falcate acute, lower one compreſſedly fiſtuloſe, chambered, upper ones ſolid, flat, ſtiffiſh, far-ſheathing, and beyond the ſheaths ſhorter than the loweſt.

loweſt. Rachis flexuoſe, when ſtripped of its flowers, like that of wheat. Spike (ſometimes two, the lower confluently adpreſſed) linear, diſtich with from fifty to one hundred cloſely imbricated ſmall flowers, blueiſh with a tinge of purple at the tips of the inner ſegments. Outer valve of ſpathe ovate, with a broad pellucid membranous edge, ſhorter than the faux, which is compreſſed and ſlightly recurved. Limb bell-ſhaped (in the upper flowers ſometimes ſubbilabiately arranged) ſegments equal, narrowly oval-lanceolate, alternate ones interior. Stamens adſcendent parallel nearly the length of the piſtil. Anthers incumbent, dark blue with a ſagittate baſe. Said to vary with white flowers. Scentleſs. Like WATSONIA *ſpicata*, ſometimes produces ſmall oblong bulbs, 1—3, in each ſpathe inſtead of flowers, theſe germinate when fallen off.

Found by THUNBERG near the town, at Swellendam, in Carro, and ſometimes in the high-roads. Our figure was taken from a plant received ſome time ſince from the Cape, with many others, by Meſſrs. GRIMWOOD and WYKES, at Kenſington. Introduced into the royal gardens at Kew in 1774, by Mr. MASSON. This is the ſmalleſt of the tribe yet known. We have ſeen WATSONIA *aletroides* with as many flowers, as cloſely imbricate, and permanently diſtich.

No. 523. alter as follows:

WATSONIA SPICATA. HOLLOW-LEAVED WATSONIA.

WATSONIA *ſpicata;* foliis linearibus teretibus: imo breviore verticali molliter mucronulato, ſpica diſticha ſubamentiformi, limbo æquali campanulato-patente. *G.*

IXIA ſpicata. *Soland. Herb. Bankſ. Willd. Sp. Pl.* 1. 200.

IXIA alopecuroidea. *Linn. Suppl.* 92.

GLADIOLUS ſpicatus. *Roy. Lugdb.* 19. *Sp. Pl.* 53. *Thunb. Diſſ.* 13. *Prod.* 8. *Syſt. Veget. Murr.* 86. *Syſt. Nat. Gmel.* 111.

GLADIOLUS fiſtuloſus. *Jacq. Hort. Schoenb. v.* 1. *tab.* 6.

GLADIOLUS tubuloſus, foliis cylindraceis, nervoſis, glaberrimis, florum ſpica diſticha. *Burm. Prod. fl. cap.* 2.

GLADIOLUS. *Herb. Hermann. (ex quo Linnæus floram Zeylanicam confecit) apud Biblioth. Bankſ. vol.* 4. *pag.* 21. *inter plantas Zeylanicas agglutinatus, Linnæi manu ſubſcriptus.*—GLADIOLUS *ſpicatus. Herb. Linn.* 8. *eſt* GLADIOLUS communis. *G.*

Spathe 2-valved, ſtigmas biſid, leaves 4. ſtem ſimple.



MASSONIA ENSIFOLIA. TRUMPET-FLOWERED MASSONIA.

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cor. infera limbo sexpartito. *Filamenta* collo tubi imposita. *Caps.* 3-alata, 3-locularis polysperma.

Specific Character and Synonyms.

MASSONIA *ensifolia;* bracteis pedicellis brevioribus, corollæ laciniis revoluto-patentibus tubo pluries brevioribus, filamentis sessilibus capillaribus: alternis longioribus, foliis lanceolatis. *Gawler.*

MAUHLIA ensifolia. *Thunb. nov. gen.* 111. *Nov. gen. char. ess. apud Prodrom. iterum, p.* 60. *t.* 1.

AGAPANTHUS ensifolius. *Willd. Sp. Pl.* 2. 48.

POLYANTHES pygmæa. *Jacq. ic. rar.* 2. *t.* 380. *Collect. supp.* 56. *Willd. Sp. Pl.* 2. 165. *iterum!*

MASSONIA violacea. *Bot. Repos. tab.* 46. *Ejusque recens.* AGAPANTHUS *ensifolius.*

DESC. *Bulb* tunicated. *Leaves* two, opposite, from two to four inches long, lanceolate, contracted at the base into a sort of petiole, firm, smooth, shining underneath with a subtle cartilaginous acute-crenulate margin, scarcely visible to the naked eye. *Scape* central from the bosom of the leaves, round, but slightly sulcate-angulate from the decurrent bractes, whitish, from two to three inches long. *Pedicels* scarcely half an inch long, filiform, whitish. *Bractes* ovate-subulate, subdecurrent, whitish, one at the base of each pedicel, than which it is shorter by half. *Flowers* in a compact corymb, rarely lengthened out into a lax thyrse. *Cor.* subpersistent, narrow-tubed, club-shaped when not expanded, from one inch to an inch and half long, pale violet coloured, very shining. *Tube* nearly straight, somewhat recurved, several times longer than the limb, with a honey-bearing base. *Segments of the limb* equal, rather oblong, acute, revolute-patent. *Filaments* sessile (i. e. inserted immediately

immediately into the mouth of the tube, not upon a raiſed neck of the tube, as in ſome ſpecies of MASSONIA) capillary, not dilated at the baſe, the alternate ones longer (as in HYACINTHUS *corymboſus*) nearly equalling the limb. *Anthers* very ſmall roundiſh-oval. *Germ* upper, oblong, ſulcate. *Style* erect, ſubulate-filiform, nearly equalling the corolla. *Stigma* ſimple (covered with ſtalked glands, according to JACQUIN, perhaps as in SCILLA *non-ſcripta?*). *Capſule* ſcarious, ovate, acutiſh, three-cornered with compreſſed-acute dehiſcent angles, three-celled, three-valved with ovate valves longer than the bractes.—JACQUIN ſays it is fragrant, which we have never obſerved.—It was found at the Cape, by THUNBERG, in a diſtrict between Soendag and Viſch Rivers, flowering about December.

MASSONIA is very nearly allied to HYACINTHUS, particularly to the Cape ſpecies, and had we followed our own ideas of natural affinity, we ſhould have rather placed this ſpecies under the latter genus: in doing as we have, we merely yield to the eſſential characters as they at preſent ſtand. Perhaps it will be hereafter found unneceſſary to ſeparate theſe genera at all, or, if they are diſtinguiſhed, a conſiderable transfer of the ſpecies muſt be made. JUSSIEU has hinted, that it would be more natural to take the character of HYACINTHUS from the corolla than from the germ. For not continuing it as a congener of AGAPANTHUS *umbellatus* or of POLYANTHES *tuberoſa*, we believe no apology is neceſſary; but to ſuch as think differently, or that it is a diſtinct genus, we offer the above deſcription from Mr. GAWLER, as its natural character. *Enſifolia* is a very bad name, but better than a new one.—THUNBERG's figure was certainly taken from a dried ſpecimen, and in the Bankſian Herbarium is one, ſo preciſely reſembling it, as to induce a ſuſpicion that it is the very one from which his drawing was made. The ſame collection contains a very cloſely allied ſpecies, under the name of MASSONIA *uniflora*, with a larger flower and a ſingle narrow linear leaf.

With us it flowers in October or November; requires the ſame treatment as other Cape bulbs, but the roots ſhould not be taken up, preſervation from wet in their inactive ſtate being ſufficient. The Rev. Mr. BALE informs us, that with him it produces abundance of offsets, while others complain of its ſlow propagation in this way; it produces ſeed however with all. Was introduced by Mr. WILLIAMS, Nurſeryman at Turnham-Green, who raiſed it from Cape ſeeds, together with a very pretty purple variety, about the year 1791. Our drawing was made at EDWARD WOODFORD's, Eſq. laſt November.

ZINNIA TENUIFLORA. SLENDER-FLOWERED ZINNIA.

Class and Order.

SYNGENESIA POLYGAMIA SUPERFLUA.

Generic Character.

Recept. paleaceum. *Pappus* aristis 2 erectis. *Cal.* ovato-cylindricus, imbricatus. *Flosculi* radii pauci persistentes, integri.

Specific Character and Synonyms.

ZINNIA *tenuiflora;* floribus pedunculatis: radio lineari revoluto-patenti scabro, seminibus disci uni-aristatis.

ZINNIA *tenuiflora;* foliis sessilibus; floribus pedunculatis, seminibus hermaphroditarum hinc donatis arista longissima, illinc gemino mucrone brevissimo. *Jacq. Collect.* 5. *p.* 159. *Icon. tom.* 3. 590.

This lively annual, which grows to the height of two or three feet and divides into several branches, is most probably a native of South-America. It was, we believe, first raised in this country, in the garden of EDWARD WOODFORD, Esq. at Vauxhall, from seed sent to him by Monsr. THOUIN, national Gardener in Paris. Should be sown in the Spring upon a common hot-bed, with balsams and other tender annuals, and planted out into the open border the latter-end of May, where it will continue to blossom for some months and produce ripe seeds in favourable weather.

It has been well figured by JACQUIN, in his *Icones plantarum rariorum*, and described in his *collectanea;* to which description we have nothing to add, but that the florets of the radius, in the specimens we have seen, are sharp-pointed, very rough to the touch, and of a lively pale green colour underneath, not a dingy white, as he describes them.

S Edwards del Pub by W Curtis St Geo Crescent Mar 1 1802 F S Wyon sculp



S. Edwards del. Pub by W. Curtis, St. Geo. Crescent Mar 1, 1802 E. Taylor sculp.

GLADIOLUS VERSICOLOR, *var.* TENUIOR (γ).
SMALL CHANGEABLE CORN-FLAG.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Vide No. 538.

Specific Character and Synonyms.

GLADIOLUS *versicolor*; foliis enſiformi-linearibus utrinque tricoſtatis, valvula ſpathæ extima faucem ex ſuperante, laciniis extimis ellipticis: lateralibus inferioribus anguſtioribus unguiculatis. *Gawler.*

(α) MAJOR foliis lineari-enſiformibus, coſtis laminato-elevatis, faciebus laterum paginulatis ſulcato-planis, valvula extima cuſpidata ſpirali-convoluta corolla adequata. *G.*—*Noctu odorus.*

GLADIOLUS *verſicolor. Bot. Rep. tab.* 19. *ejus Recenſ. n.* 12.

(β) INÆQUALIS; foliis trinerviis ſtriatis ultra vaginam brevioribus: lateribus non paginatis, laciniis ſupremis brevioribus: intermedia breviſſima: infima reliquis longiore. *G.*

GLADIOLUS floribus e ſpadiceo et flavo variegatis, ſuprema lacinia breviſſima. *Breyn. prod. pl. afr. p.* 2. *p.* 20. *t.* 7. *f.* 1.

GLADIOLUS triſtis minor, *Soland. flor. cap. ined. et Herb. Bankſ.*

(γ) TENUIOR; foliis antecedentis, laciniis externis ellipticis longioribus, obtuſulis emarginatis apice convolutis undulatis, laciniis imis macula informi notatis. *G.*—*Interdiu odorus.*

GLADIOLUS triſtis (α) *odorus. Thunb. Diſſ. de Glad.* 8.

(δ) LONGIFOLIUS; corollis minoribus ſubviolaceis punctatis, folio exteriore varietatis (α) pluries vero anguſtiore ſcapoque longiore. *G.*

GLADIOLUS triſtis prioris var. *Jacq. ic. rar. v.* 2. *t.* 245. *Coll.* 4. *p.* 458.

OBS. *Folia in* (α) *omnino* GLADIOLI *Watſonii, retro* 450. *edit. G.*

This ſeems to be the intermediate ſpecies of GLADIOLUS *triſtis* and GLADIOLUS *recurvus* of LINNÆUS (the latter of which

which is GLADIOLUS *carinatus* of *Hort. Kew.* and *punctatus of* JACQUIN); from the firſt it differs in not having quadrangular leaves, from the laſt in not having ribleſs ones, from both in the proportionately longer outer valve, beſides ſlighter diſtinctions.

The name of *verſicolor* was probably given to variety (α) from a ſlight change perceptible in its colour after ſun-ſet, proceeding from the difference of light: in our variety this is not at all obſervable. Our figure was taken from a plant at Meſſrs. GRIMWOOD and WYKES's, who are pretty certain they raiſed it ſome time ago from Cape ſeeds, but it never flowered till this year; perhaps when the bulb is ſtronger and older it may approach nearer to *var.* (α) or may prove a permanent variety; ſcarcely a diſtinct ſpecies? (α) ſmells preciſely like the common red pink, but very powerfully ſo, and only in the evening; the preſent plant in the day-time, but we are at a loſs to ſay what the ſcent reſembles, though very fragrant. THUNBERG (we preſume from his completing his deſcriptions at his Herbarium, where the leaves of all the tall ſingle-ſtemmed ones, which are much of the ſame breadth, are preſſed into nearly an uniform appearance) has collected ſixteen varieties, under GLADIOLUS *triſtis*, moſt of which we ſhall be enabled to ſhew to be perfectly diſtinct ſpecies, at leaſt poſſeſſing ſufficient ſpecific diſtinction, the only rule we can go by where experience fails.

Erratum in laſt Number.

IXIÆ *Syn.* Sect. 7.—*for* effuſis os tubi uſque vel ultra, *read* effuſis, os tubi uſque vel ultra ~~exciſis~~ *diviſis*

TRIFOLIUM SPADICEUM. BAY-COLOURED TREFOIL.

Class and Order.

DIADELPHIA DECANDRIA.

Generic Character.

Flores subcapitati. *Legumen* vix calyce longius, non dehiscens, deciduum.

Specific Character and Synonyms.

TRIFOLIUM *spadiceum*; spicis ovalibus imbricatis, vexillis deflexis persistentibus, calycibus pilosis, caule erecto. *Sp. Pl.* 1087. *Ait. Hort. Kew. v.* 3. *p.* 90.

TRIFOLIUM caule erecto, spicis strepentibus ovatis. *Hall. Helv. n.* 365.

TRIFOLIUM montanum lupulinum. *Bauh. Pin.* 328. *Prod.* 140. *Park. Theat.* 1105.

LUPULINUM montanum capitulis spadiceis. *Rupp. Jen.* 207.

LOTUS montanus aureus amplo lupuli capite, annuus. *Barr. Plant.* 812. *Ic.* 1024.

A native of most parts of Europe, but not of Great-Britain. Has been cultivated for some years in the Botanic Garden at Brompton, where it has been the practice to raise it under a frame, and then plant it out in the open border; but most probably would succeed as well if sown with other hardy annuals in the places where it is intended to remain, being indigenous as far north as Sweden. It is a pretty little plant, both from its delicate foliage and fine chesnut-brown spikes crowned with golden-coloured flowers. How it came to be called in the Hortus Kewensis *pale-flowered*, we are at a loss to guess, except by an accidental error for *bay-flowered*.

We observe, as remarked by LINNÆUS, that the two upper teeth of the calyx are obsolete or entirely wanting.



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Lith de Lemercier Paris Lith. de Curtis

MELANTHIUM JUNCEUM. RUSH-LIKE MELANTHIUM.

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Class and Order.

HEXANDRIA TRIGYNIA.

Generic Character.

Cor. 6-petala. *Filamenta* ex elongatis unguibus corollæ.

Specific Character and Synonyms.

MELANTHIUM foliis subulatis, radicali unica, scapo ad summitatem diphyllo, floribus spicatis. *Jacq. Icon. rar.* 2. *t.* 451. *Collect. Supp.* 105.

MELANTHIUM *junceum*; foliis lineari-subulatis: superioribus basi dilatatis, spica flexuosa, petalis unguiculatis. *Willd. Spec. Pl. t.* 2. *p.* 268.

PHALANGIUM. *Houtt. Linn. pst. Syst. t.* 80. *f.* 3.

MELANTHIUM triquetrum. *Linn. Sup.* 213. *Thunb. Prod.* 67. *Willd. Sp. Pl.* 2. *p.* 267.?

DESC. *Bulb* roundish. *Root-leaf* solid at the base perfectly round and smooth, bursting at a small distance from the ground for the exit of the scape, from whence it becomes semicylindrical, attenuate, grooved on the innerside. *Scape* round, one-leafed: *leaf* similar to the root one but not grooved. *Spike* lateral, involucred, shorter than the cauline leaf. *Rachis* somewhat triangular with alternate sessile flowers. *Corolla* six-petaled, three of them outer, ovate with a short grooved claw, whitish with two dark crimson spots containing clear drops of honied liquid when the flower first opens. *Filaments* fix, a little longer than the claw, into the base of which they are inserted, patent but rising up one at a time to discharge the pollen over the styles, and then falling back to

their

their former ſtation. *Anthers* purple, with greeniſh pollen. *Germen* obtuſely three-cornered, three-celled, ſtyles three. *Capſule* the ſame: ſeeds many, roundiſh.

The MELANTHIUM *junceum*, at firſt ſight, has much the habit and appearance of an IXIA, but the moſt ſuperficial examination immediately ſhews it to belong, not only to a different claſs in the ſexual ſyſtem, but alſo to a different natural order. Still, however, there is a real affinity, and it may be conſidered in ſome meaſure as a connecting link between the IRIDES and JUNCI of JUSSIEU; for it is only to unite the claws of the petals into a tube and to join the ſtyles at the baſe and take away half the ſtamens and we have a complete flower of an IXIA, naked indeed, the MELANTHIUM having only one ſpathe or involucre to the ſpike and none to the ſeparate flowers.

From a careful examination of the ſpecimens in the Bankſian Herbarium, we are convinced that the MELANTHIUM *triquetrum* of THUNBERG and *junceum* of JACQUIN are one and the ſame; the former, having made his deſcription from dried plants only, might be eaſily led into this error; but as, in a growing ſtate, there is nothing triquetrous in the form of the leaves, we have given the preference to JACQUIN's name, although THUNBERG's has the right of priority.

Our drawing was taken from a plant ſent us by Mr. SALISBURY of the Botanic Garden, Brompton, in January laſt, ſome weeks earlier perhaps than it would have flowered had it not been forced by the heat of the ſtove. Mr. SALISBURY received it with ſeveral other curious bulbs from the Cape, the latter end of laſt Summer.

The treatment ſhould be the ſame as for other Cape bulbs.



Edwards del. Pub by T. Curtis 18 Geo. Crescent Apr. 1 1802 F. Sansom sculp.

MASSONIA MURICATA. PRICKLY-LEAVED MASSONIA.

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cor. infera limbo ſexpartito. *Filamenta* collo tubi impoſita. *Capſ.* 3-alata, 3-locularis, polyſperma.

Specific Character and Synonyms.

MASSONIA *muricata*; foliis ſubrotundis verſus apicem ſuperne muricatis nudis, corymbo compacto bracteato, ſtaminibus fauce elevata inſidentibus. *G.*

DESC. *Stem* ſcarcely above the ground. *Leaves* ſmooth, lucid, thinly beſet with thorn-like excreſcencies on the upper ſurface towards the point, with parallel furrows converging at each end. *Pedicels* thick, ſcarce half an inch long. *Bractes* elliptic, nearly the length or longer than the flowers, outer largeſt, entirely ſurrounding the corymb. *Tube* about equal to the ſtamens, nearly twice the length of the ſegments, which laſt are flaccid with a tranſverſe plait at their baſe, opaque yellowiſh white, faux ſomewhat cupped, pellucid, tinged with bluiſh-green, brimful of nectareous liquid; *ſtamens* upright, arranged in a campanulate circumference, white, with tumid azure baſes. The inſertion of the filaments may be here called mediate, in MASSONIA *enſifolia* immediate.

The corolla of this genus ſeems to have afforded as many diſtinct conceptions of its ſtructure as it has been deſcribed by different Botaniſts. THUNBERG conſiders it as hexapetalous, the ſegments as petals attached to the tube, his nectary (hence moſt probably his ejection of MASSONIA *enſifolia*). JACQUIN terms only the naked part on which the filaments are ſeated the nectary, and deſcribes it as a ſhort marginal

CROWN

crown placed on the neck of the corolla uniting the baſes of the ſtamens, thus making it a diſtinct appendage. SOLANDER *Bankſ. Mſſ.* ſpeaks of it as a ſmall nectariform ringlet, created by a ſlight coheſion of the dilated baſes of the filaments. JUSSIEU, on the other hand, calls the part we allude to, "*faux* " *prominens*," and ſays it is formed by the reflex curvature of the baſe of the ſegments, which afterwards becomes upright, and adds, that it is THUNBERG's nectary; but here he is wrong.—From all the above Botaniſts we in ſome meaſure diſſent. The corolla we hold to be completely monopetalous, and that there is no nectary conſidered as a diſtinct appendage; but in many ſpecies (of which the preſent is the moſt remarkable inſtance known to us) the outer cuticle detaches itſelf from the inner and is rolled back for a greater or leſs diſtance; of this the ſix flaccid ſegments are the diſtinct and immediate continuation, ſhrivelling almoſt as ſoon as expanded in our ſpecies; the upper part of the inner cuticle thus bared affords the nectary-like appearance authors allude to, and is (as are alſo moſt probably the filaments) the ſeparate and uninterrupted continuation of that membrane, the whole is firmer, of a diſtinct colour, and remains in vigour until the uſual proceſs of impregnation is completed.—However wide the chaſm may appear between this and MASSONIA *enſifolia*, it is naturally enough filled up by a ſeries of ſpecies, in which the denudation of the faux gradually diminiſhes till it diſappears in *enſifolia*, where the baſes of the filaments are even below the baſes of the ſegments: as the faux decreaſes ſo the elongation of the tube increaſes, and the nectareous liquid ſinks deeper and deeper till it is quite out of ſight in *enſifolia* and *uniflora*. The whole of this natural claſs is, according to JUSSIEU's ſyſtem, corollaleſs; but as it conſiſts of herbaceous thin-rinded plants and ſomewhat ſucculent, we ſuſpect the outer cuticle above mentioned is the continuation of the exterior rind *(cortex)* too fine to produce a more ſubſtantial covering, and that it correſponds with his *Calyx*; that the inner one, on the other hand, is the continuation of the interior rind *(liber)* and that it may be his *Corolla*, both being thus united to afford a ſufficiently ſubſtantial protection to the parts of fructification; if ſo, the ſame will apply to the whole claſs; it is evident in this genus the two coats are ſpontaneouſly ſeparable, of different degrees of duration, the inner one abiding the proceſs of impregnation, then withering. We merely offer this hint for the preſent, nor do the limits of the work permit the inſertion of ſome further obſervations we have made on this ſubject. Our drawing was made in the garden of ED. WOODFORD, Eſq. *Gawler.*

ROBINIA GLUTINOSA. CLAMMY ROBINIA.

Class and Order.

DIADELPHIA DECANDRIA.

Generic Character.

Cal. 4-fidus. *Legumen* gibbum elongatum.

Specific Character and Synonyms.

ROBINIA *glutinosa*; racemis axillaribus pedicellis unifloris, foliis impari-pinnatis, ramis glutinosis.

The ROBINIA *glutinosa* is a beautiful tree, a native of North-America, and perfectly hardy in our climate. It appears to be of smaller size than the ROBINIA *Pseud-acacia*, which it much resembles in habit, but when in blossom is readily distinguished by its rose-coloured flowers, and at all times by its glutinous branches and shorter straight spines. The leaves are deciduous, consist of from eight to ten pairs of leaflets with an odd one, ovate, entire, glaucous underneath, and in the older leaves obtuse. Stipulæ, two short straight spines at the base of every petiole very weak, but persistent and becoming hard spines in the old wood. There are also very minute ones at every pair of leaflets. The young branches are covered with glands of a dark red colour which exude a clammy juice.

It is a free-growing tree, handsomer in its form than the *Pseud-acacia*, and, from the wood being less brittle, is not so apt to be disfigured by the high winds. Flowers in June and July.

Introduced into this country by Mr. WHITLEY, in whose nursery at Old Brompton it flowered sparingly in the Summer of 1800, and plentifully last year. Is usually increased by engrafting on the *Pseud-acacia*, but may be readily propagated by planting cuttings of the roots, as we are informed by Mr. LODDIDGES, of Hackney, who also imported it from America some years since.





T Curtis, St Geo

ANTHOLYZA ÆTHIOPICA. FLAG-LEAVED ANTHOLYZA.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Spatha bivalvis ovata: *Cor.* irregularis, recurva: tubus gracilis: limbus ſexpartitus. *Stam.* adſcendentia. *Stigm.* 3, recurvo-patentia. *Capſ.* rotunda, coriacea. *Sem.* plura ſubrotunda. G.

OBS. *A* Watſonia *ſtigmatibus non bifidis; a* Gladiolo, *cui conjunctiſſima, ſeminibus pauciоribus neque alatis; ab* Ixiæ *fauce magis elongata ſtaminibuſque adſcendentibus dignoſcenda.* G.

Specific Character and Synonyms.

ANTHOLYZA *æthiopica* foliis enſiformibus ſtriatis, fauce e tubo pedicelli-formi, quo duplo longiore, abrupte cylindrico-ampliata; lacinia ſuprema maxima porrecta, cæteris recurvis. G.

ANTHOLYZA *æthiopica. Sp. Pl.* 54. *Reich.* 103. *Thunb. prod.* 7. *Murr. Syſt. Veg.* 87. *Gmel. Syſt. Nat.* 113. *Hort. Kew.* 1. 67. *J. F. Mill. Ic. Plant. & Anim. t.* 9. *Willd. Sp. Pl.* 1. 222.

GLADIOLUS pyramidalis. *Burm. ſl. cap.* ?

GLADIOLUS æthiopicus. *Corn. canad. t.* 79. *Mor. Hiſt.* 2. *p.* 421. *ſ.* 4. *t.* 23. *f.* 1. *Rudb. elyſ.* 2. *p.* 235. *f.* 2.

HYACINTHUS africanus. *Pluk. Phyt.* 195. *f.* 2.

ANTHOLYZA *ringens. Bot. Rep. t.* 32. *iterum (emendato nomine triviali) t.* 210. *ejus Recenſ.* ANTHOLYZA *æthiopica, n.* 21.

Bulb large, compreſſed, convex, concave beneath, covered with a fibrous tunic. Leaves many, limber, ſtriated, equitant downwards, upper ones gradually longer, midrib ſtiff. Stem roundiſh, ſtrict, upright, ſcarcely flexuoſe at the rachis, 3—4 feet high, about a third longer than the leaves. Spike pyramidal-oblong; flowers 10—40, diſtich, almoſt imbricate, ſcentleſs.

lefs. Tube 6-fulcate, generally twifted. Faux cylindric, bluntly keeled underneath. Upper fegment concave, blunter, about the length of the parts of fructification, which are accumbent to it, the others acute, flat, much fmaller, three alternate ones leaft, two lower lateral ones larger than thefe, but far lefs than the uppermoft one. Anthers fubfagittate-linear, dark purple. Capfule the fize of a fmall cherry, burfting when the feeds are ripe; feeds deep yellow, roundifh, preffed nearly into angles from mutual juxta-pofition.

We are far from offering the above effential character as a permanent one, or with confidence, fo few fpecies having yet fallen in our way; but we hope foon to give fomething more definite. The capfule and feeds are precifely thofe of GLADIOLUS *communis*, which in thofe parts differs from all other GLADIOLI, in fo much that, could this be feparated from the other fpecies and added to ANTHOLYZA, the characters of the two would be eafy and precife; the one with round capfule and feeds, the other with an oblong capfule and numerous lenticular-fhaped winged feeds.

For the means of prefenting this beautiful plant to the public, we are indebted to the Rev. SACKVILLE BALE, who, aware of the rarenefs of its flowering, moft kindly remitted it to us from his collection at Withyham, near Tunbridge, where it flowered by the help of the ftove in February. It flowered ftill earlier at Meffrs. RUSSELL and WILMOT'S Nurfery, at Lewifham, who have had the goodnefs to fend us the fpike with ripe feeds, and is at this time coming into flower in the greenhoufe of EDWARD WOODFORD, Efq. Vauxhall. Had our drawing been fortunately taken before the upper flowers were expanded, the pyramidal form would have been an advantage to our figure. Cultivated by MILLER in 1759. Flowers in May and June, according to *Hort. Kew.* The trivial name (given it by CORNUTI) of *Æthiopian*, is not a very eligible one for a plant peculiar to the Cape and adjacent country; he mentions its flowering at Paris in 1633, his figure excellent. In habit of corollæ it approaches GLADIOLUS *Watfonius* and GLADIOLUS *quadrangularis*, which laft we fhall give in our next number.

GLADIOLUS GRACILIS. SLENDER CORN-FLAG.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Spathæ valvula exterior lanceolata. *Cor.* basi tubulosa; limbus 6-partitus irregularis vel subirregularis. *Stam.* adscendentia. *Antheræ* parallelæ. *Stigm.* 3 sursum dilatata ex complicato explicata. *Caps.* trigono-oblonga, lenta. *Sem.* numerosa. G.

OBS. *Retro* (n. 538.) "*limbum interdum sed rarius hypocrateriformi-regularem*" *diximus; iterato vero sedulo examine idem omnino regularis nusquam prodit; unde irregularitatem in characterem resumpsimus.* G.

Specific Character and Synonyms.

GLADIOLUS *gracilis*; corolla subnutante campanulato-bilabiata; foliis linearibus marginibus utrinque laminato-costatis, nervo medio costis valde depressiore, lateribus sulcato-paginatis. G.

GLADIOLUS *gracilis. Jacq. ic. rar.* 2. *t.* 246. *Coll.* 4. *p.* 159. *Willd. Sp. Pl. v.* 1. *p.* 211.

GLADIOLUS punctatus. β. *Soland. ined. Herb. Banks.*

The leaves of this species have the appearance of being thick and flat, with a deep square groove on both sides, owing to the midrib being nearly obsolete and the marginal ones projecting far forwards; 3—4, about a line broad, far sheathing, and short beyond; stem very slender, straight, simple, geniculately-flexuose upwards, 1—3 feet high, generally longer than the leaves, with two brownish root-sheaths at the base, not spotted, as in GLADIOLUS *recurvus.* Flowers 3—4, scentless. It approaches GLADIOLUS *Watsonius* in the leaf, which is however in this more linear with a depressed midrib; in the flower it comes near to GLADIOLUS *recurvus*, but has a different leaf. Bulb very small in proportion to the height of the stem. A native of the Cape, and is said by JACQUIN to vary with white flowers. Our figure was taken at Messrs. GRIMWOOD and WYKES's nursery at Kensington, who have been long in possession of the plant. It flowers freely about March and April, and is by no means one of the tenderer species.



...us del Pub. by T. Curtis, 8ᵗ Geo: Crescent May 1. 1802 F. Sansom sculp.

PHLOX STOLONIFERA. CREEPING PHLOX.

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cor. hypocrateriformis. *Filamenta* inæqualia. *Stigma* 3-fidum.
Cal. prismaticus. *Caps.* 3-locularis 1-sperma.

Specific Character.

PHLOX *stolonifera*; stolonibus repentibus, foliis spatulato-obovatis.

Twelve species of PHLOX are enumerated in WILLDENOW'S edition of the Species Plantarum of LINNÆUS, of which four have been already figured in the Botanical Magazine. From all these this is totally distinct, having trailing stalks which take root at every joint, much in the manner of AJUGA *reptans* and VIOLA *odorata*, whence our trivial name. Leaves obovate, spatulate, with ciliated petioles. Peduncles or flowering stalks erect, both immediately from the roots, and from the axils of the leaves, bearing an umbel or cyme of nodding flowers of a bright violet colour, and furnished with 1—4 pair of linear-lanceolate leaves or bracteæ, hairy at the edges, sometimes opposite and sometimes alternate. Four of the filaments are the length of the tube, and one shorter by half, which gives the flower the appearance of being tetrandrous.

We are informed by Mr. JOHN FRASER, of Sloane-Square, Chelsea, that he first discovered this plant in Georgia, in the year 1786, together with PHLOX *pilosa*, *setacea*, and *subulata*, but that living plants were not brought to Europe till 1801, his sixth voyage to North-America, on botanical researches, in company with his son. This last voyage was undertaken in consequence of an ukase of their late imperial Majesties the Emperor and Empress of all the Russias, appointing him their Botanical Collector. We trust that so much zeal will meet with a due reward.

It promises to be a valuable addition to our gardens, particularly calculated for ornamenting rock-work, being, we are assured, perfectly hardy in our climate, although the specimen from which our drawing was made last Summer was flowered in the stove: if planted in a pot and placed on a pedestal or flower stand, with the branches suffered to hang down the sides, it must when in full flower make a very shewy appearance.



S. Edwards del. Pub. by W. Curtis, S.t Geo: t Crescent May 1. 1802 F. Sansom sculp.

CACALIA COCCINEA. SCARLET-FLOWERED CACALIA.

Class and Order.

SYNGENESIA POLYGAMIA ÆQUALIS.

Generic Character.

Recept. nudum. *Pappus* pilosus. *Cal.* cylindricus oblongus basi tantum subcalyculatus.

Specific Character and Synonyms.

CACALIA *coccinea*; caule herbaceo, foliis radicalibus ovatis spatulatis, caulinis integris amplexicaulibus crenatis marginatis.

A tender annual, to be raised on a hot-bed in the Spring, and about the middle of June it may be planted into the open border, where it will ripen its seeds. Its fine scarlet flowers make a brilliant appearance, but its stalks, being weak and growing two or three feet high, should be properly supported to preserve its beauty from being marred by high winds or heavy rain. Our drawing was made at Mr. WOODFORD'S, at Vauxhall, who received the seeds from Mr. THOUIN, national gardener at Paris in the Spring of 1800, under the name of CACALIA *sonchifolia*; but as it neither answers to the description of that species, nor at all resembles the specimens preserved in the Banksian Herbarium, we consider it as a totally distinct species; and not finding that it has been hitherto described or figured, we have given it a name expressive of the colour of its flowers and a specific character, which we believe will sufficiently distinguish it from every other known species.



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CLEMATIS VITICELLA. PURPLE VIRGIN'S-BOWER.

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Class and Order.

POLYANDRIA POLYGYNIA.

Generic Character.

Cal. 0. *Petala* 4—6. *Semina* caudata.

Specific Character and Synonyms.

CLEMATIS *Viticella;* foliis compositis decompositisque: foliolis ovatis sublobatis integerrimis. *Linn. Sp. Pl.* 765. *Hort. Cliff.* 225. *Mart. Mill. Dict. art.* 2.

CLEMATIS foliis compositis decompositisque: foliolis ovatis sublobatis integerrimis, petalis obovatis patentibus. *Willd. Sp. Pl.*

CLEMATITIS cærulea vel purpurea repens. *Bauh. Pin.* 300.

CLEMATITIS altera. *Clus. Hist.* 1. *p.* 122. *quoad figuram, descriptio nimis manca cuidam alteri pertinere videtur.*

CLEMATITIS peregrina cærulea sive rubra. *Ger. emac.* 887. *f.* 1. & 2. *Raii Hist. p.* 622.

The CLEMATIS *Viticella* is a native of Spain and Italy, and bears the cold of our winters very well; is a very ornamental climber, and its flowers sweet-scented. Though well known to our older Botanists, and cultivated as long ago as the year 1569, by Mr. HUGH MORGAN,* it is by no means common: the double variety is more so; but this in our opinion, though preferred by MILLER, is not so handsome as either of the single red or purple varieties, both of which grow in the greatest perfection at the nursery of Messrs. WHITLEY & Co. Old-Brompton, where our figure was taken last year.

It flowers in June and July. Is propagated either by seeds, which it sometimes produces in this country, or by laying the young shoots down early in the Spring or at the latter-end of July, the mode of doing which is fully detailed in MARTIN'S MILLER'S Dictionary; but Mr. WHITLEY prefers the former time, to that recommended by MILLER.

* Hort. Kew.



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by T. Curtis, St. Geo: Crescent. June. 1. 1802 F. Sansom sculp.

IXIA FALCATA. SICKLE-LEAVED IXIA.

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Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Spatha 2-valvis. *Cor.* basi tubulosa, tubus gracilis, limbus 6-partitus, regularis *(rarissime subirregularis)* subæqualis patens. *Fil.* limbo plureis breviora, recto-patentia, vel coarctato-erecta. *Stigm.* 3, patentia. *Sem.* numerosa globosa. *G.*

No. 549, *in* CHAR. ESS. *lapsu calami post* "limbus" *omissimus* "6-partitus." *Ad calcem No.* 556, *apud* ERRATUM, *pro* "excisis" *lege* "divisis."

Specific Character and Synonyms.

IXIA *falcata;* spatha herbacea striata, corolla erecta: laciniis ovalibus concavis, antheris horizontalibus, stigmatibus usque tubum divisis longis effusis prostratis curvatis. *G.*

IXIA *falcata. Linn. Suppl.* 92. *Thunb. Diss. n.* 23. *prod.* 10. *Murr. Syst. Veg.* 85. *Gmel. Syst. Nat.* 110. *Hort. Kew. addend. Jacq. ic. rar.* 2. *t.* 276. *Coll.* 4. 183. *Willd. Sp. Pl.* 1. *p.* 207.

IXIA cinnamomea. *Bot. Rep. tab.* 44. *ejusque Recens. n.* 2.

Bulb about the size of a large pea, campaniform, base flat, tunics brown, these in old plants are placed imbricately one over the other 10—15 deep, which gives the bulb the appearance of being greatly larger than it really is; we have seen them thus piled nearly an inch high. Leaves 3—4, alternate, ensiform, from three inches to a foot long, nerved-striated, two lower ones nearly opposite, reflex-falcate (sometimes almost straight) cauline ones fistulosely sheathing, compressedly-ancipital, remote, longer, often edged with a membranous pellucid serrately scabrous margin. Stem from six inches to a foot high, lax, simple, or with axillary branches, generally three or four times longer than the leaves, upright. Flowers 5—20, erect, beginning to expand a little before sunset, when they diffuse a fine

fine aromatic odour like ſome of the varieties of honeyſuckle. Spathe ſomewhat ſhorter than tube, ſubconduplicate, keeled, and often edged in the manner of the cauline leaves. Tube about the length of the limb, which is quite patent, exterior ſegments largeſt and ſomewhat reflexed, of a fine ſhining brown on the outſide*, interior ones all white and ſomewhat more concave. Anthers ſagittately ſubulate incumbent, verſatile, pale, each of them ſomewhat reſembling in poſition the needle of a mariner's compaſs. Stigmas capillary, ſometimes pubeſcent.

Introduced into Kew garden by Mr. MASSON in 1787, flowers in April. We can perceive no difference between this and IXIA *cinnamomea*, except in the remarkable criſpature of the leaves and more numerous ſmaller flowers of the latter:—may theſe diſtinctions be loſt by culture? The former was found by THUNBERG on the hills about Cape-Town, the latter on thoſe of Loweſtaart. They are both called by the Dutch *Cannelbloem*, on account of their ſmell, as alſo *Avondbloem*, from their time of flowering, which at the Cape is ſaid to take place ſo preciſely at four in the afternoon, that the hour of the day may be known by it, except rain is at hand, which, by remaining cloſed, they predict as certainly as a barometer. Both, as well as IXIA *piloſa* and *radiata*, are in great requeſt there on account of their fragrance. Propagates with us by ſeed and offsets, but more ſlowly than moſt other ſpecies of this family. It is apt to luxuriate in the number of ſegments and in the parts of fructification. Our drawing was taken at the nurſery of Meſſrs. GRIMWOOD and WYKES, Kenſington, where it flowered this year in great perfection, the root throwing up two ſtems. It requires a very ſmall pot, to be put entirely in bog-earth, and when paſt flowering to be carefully preſerved from all moiſture. Is ſtill one of the rarer ſpecies. G.

* In JACQUIN's figure the colour is a bright carmine, and in the deſcription is ſaid to be purple.



St Geo. Crescent June 1. 1792. Lambert Sculp.

GLADIOLUS QUADRANGULARIS. SQUARE-LEAVED CORN-FLAG.

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Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.—Vid. No. 562.

OBS. *Antheræ dorso accumbenter suspensæ, versatiles, subtus dehiscentes; Stigmata his imminent.* G.

Specific Character and Synonyms.

GLADIOLUS *quadrangularis;* foliis ensiformi-linearibus sulcato-quadrangulatis, corolla geniculato-recurva: fauce cylindrica tubo subæquali, lacinia suprema maxima porrecta: infima minima subulata. G.

ANTHOLYZA *quadrangularis;* staminibus declinatis: alis revolutis: foliis lineari tetragonis. *Burm. fl. cap.*

GLADIOLUS *abbreviatus. Bot. Rep. tab.* 166.

Leaves precisely those of GLADIOLUS *tristis*, n. 274. Stem 2—3 feet high, upright, rigid, round, tinged with reddish yellow towards the Rachis. Flowers 2—3, ground yellow, covered with dotted scarlet lines confluent towards the base of the faux. Spathes coloured like the flowers, but uniformly so not streaked, outer valve the length of the faux. Corolla very irregular. Upper segment ovate-oblong, very large, hyaline on the sides, two upper lateral ones rhomb-ovate, several times smaller, but larger than lower lateral ones, which are ovate, acute, lowest very small, awl-shaped; the three lowermost have twin-ovate lucid green stains in the middle.

This very rare and singular plant, a native of the Cape, was introduced by Messrs. LEE and KENNEDY, Nurserymen at Hammersmith.

Hammerſmith. Flowers about the ſame time as GLADIOLUS *triſtis*, or rather earlier, about the beginning of April. Is perfectly ſcentleſs. The ſeed-veſſel preciſely that of GLADIOLUS *triſtis*. Eaſily propagated by offsets, but is ſtill rare.

BURMAN's deſcription is more vague and brief than we could have wiſhed, yet there can be little doubt of his deſigning our plant, when all the circumſtances are taken together, ſuch as the name, and its ſtation in his liſt, where it ſtands immediately after ANTHOLYZA *æthiopica* and *cunonia*, L. to both of which it has a very conſiderable reſemblance. According to him, it flowered in Holland in 1760, and grew two cubits high. *G.*

CYANELLA CAPENSIS. PURPLE-FLOWERED CYANELLA.

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cor. 6-petala: petalis 3 inferioribus propendentibus. *Stamen* infimum declinatum longius

Specific Character and Synonyms.

CYANELLA *capenſis;* foliis undulatis, ramis patentiſſimis. *Syſt. Vegetab.* 329. *Jacq. Hort.* 3. *p.* 21. *t.* 35. *Andrews's Bot. Rep. t.* 141. *Gært. fruct.* 68. *t.* 17.

CYANELLA caule folioſo paniculato, racemis divaricatis, foliis lanceolatis undulatis. *Willd. Sp. Pl. t.* 2. *p.* 131.

CYANELLA foliis lanceolatis undatis, ramis divaricatis. *Thunb. act. Holm.* 1794. *p.* 196. *Prod.* 65.

This is a native of the Cape of Good-Hope, growing ſpontaneouſly at the foot of the Table Mountain. The conical bulbs about the ſize of thoſe of CROCUS *vernus* are ſaid to be edible when roaſted. There is a great ſingularity in the growth of the ſtamens, which diſtinguiſhes the genus from every other: five of them have very ſhort filaments and erect incurved anthers which open at the point, the ſixth is declined and much longer both in the filament and anther, which laſt is tongue-ſhaped and grooved in the middle, upon this the ſtyle is incumbent; the lower one only, except in colour, has the common appearance of an anther, but all ſix are conſidered as ſuch.

In external habit it is very ſimilar to DIANELLA *cærulea*, No. 505, and in the flower to IXIA *ſcillaris*, No. 542.

Is ſaid to have been cultivated by MILLER, in 1768, but in his deſcription, he ſays, "the peduncle ariſes immediately from "the root ſupporting one flower;" from which we infer that his plant was not the CYANELLA *capenſis*. Our figure was taken in April 1801, at the Garden of GEORGE HIBBERT, Eſq. at Clapham. Requires the ſame treatment as other Cape bulbs.



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BOTANICAL MAGAZINE.

THE PROPRIETORS acknowledge, with Gratitude, the public Favour ſhewn to the BOTANICAL MAGAZINE by a progreſſively increaſing Demand.

The Plan adopted of giving an additional Figure in each Number, when it became neceſſary to raiſe the Price, has given ſo much Satisfaction, that ſome have even thought it a ſufficient Recompence for the Advance. It is indeed obvious, that the greater the Number of individual Species the Work comprehends, the more does its real Value riſe. This Reflection, added to the Impoſſibility of keeping Pace with the Wiſhes of his Friends in the preſent confined Limits of the Magazine, has determined the EDITOR to double the monthly Qantity publiſhed.

The Purchaſers will therefore pleaſe to take Notice, that the future Numbers will contain EIGHT COLOURED PLATES, and will be ſold for Three Shillings;—*the proportional Price remaining as before.* This Increaſe, the Editor has no Doubt, will be acceptable to the Public, but he cannot pledge himſelf to continue it longer than he may find convenient.

JULY 1, 1802.

Printed by S. Couchman, Throgmorton-Street.



Jod Edwards del. Pub.d by W.Curtis St.Geo. Crescent Fulh.m 1 1802. F.Sansom sculp.t

GLADIOLUS WATSONIUS (*var.* β.) DWARF WATSON'S CORN-FLAG.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Spathæ valvula exterior lanceolata. *Cor.* basi tubulosa: limbus sexpartitus irregularis vel subirregularis. *Stam.* adscendentia. *Antheræ* parallelæ. *Stigm.* 3. sursum dilatata ex complicato explicata. *Caps.* trigona, oblonga, lenta. *Sem.* numerosa. G.

OBS. *Antheræ dorso accumbenter suspensæ, versatiles subtus dehiscentes; Stigmata his imminent.* G.

Specific Character and Synonyms.

GLADIOLUS *Watsonius* foliis ensiformi-linearibus utrinque tricostatis: lateribus sulcatis, fauce cylindrica, laciniis recurvis subæqualibus: suprema rectiore. G.

α. Corollis rubris.

GLADIOLUS *Watsonius. Bot. Mag.* 450. *To the Synonyms there quoted may be added,*

GLADIOLUS *recurvus. Houtt. Linn. Pl. Syst.* 11. *p.* 59. *t.* 79. *f.* 1. nec vero Linnæi vel Thunbergii.

ANTHOLYZA *revoluta. Burm. Prod. fl. cap.*

GLADIOLUS *præcox. Bot. Rep.* 38. *ejus Recens.* 16. Gladiolus Watsonius.

β. Corollis majoribus luteo variegatis.

We are induced from the beauty and rarity of this plant (though a variety differing in little else than colour from that already published by Mr. CURTIS) to offer it to the public. It has been very lately imported from Holland by Mr. COLVILLE, of the King's-Road, Chelsea, and we believe has never before

before been ſeen in England. It is not above one-third the height of *var.* α, and is of a more beautiful colour. The leaves of both, from the prominence of their ribs, have the appearance of being thick and biſulcate on each ſide and the bottom of the furrows glaucous. Segments modifications of lanceolate bilabiately arranged, the loweſt dependent, all either patent or recurved; when patent the uppermoſt one points ſtraight forward, when recurved that is only patent, thus ever differing in direction, all nearly the length of the faux. Scentleſs. Flowers in February and March: (α) was found at the Cape by THUNBERG on the ſides of mountains, particularly on thoſe of Leuweſtaart, alſo near Conſtantia, and in ſome other diſtricts, flowering in our ſummer months. The firſt variety is become very common, and is one of the earlieſt blowers of its family. We ſuſpect our preſent variety to have been produced by ſeed in Holland, never having yet found it in any herbarium or ſeen it produced from any bulb immediately from the Cape. It is not improbable that the diminiſhed ſtature may be in ſome way connected with the variegation of the corolla, in the ſame manner as tulips whilſt they blow of a plain colour have a very long ſcape, which when, in the language of floriſts, the flower breaks, immediately loſes half or two-thirds of its length. We have obſerved the ſame diminution of ſize in ſeveral other inſtances in this natural order upon the flower becoming variegated. *G.*

Sydenham del. Pub. by T. Curtis St. Geo. Crescent July 1. 1802. Fra. ngm sculp

IXIA CAPILLARIS (*var.* γ.) GRACILLIMA.
SLENDER IXIA.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.—*Vid.* No. 566.

Specific Character and Synonyms.

IXIA *capillaris* ſpatha ſcarioſa 5-ſtriata divaricata, tubo et fauce turbinato-continuis ſubſulcato-angulatis, laciniis lineari-oblongis, antheris conniventibus ſtigmata ſubæquantibus. *G.*

(α) *Gracillima*, foliis linearibus anguſtiſſimis non marginatis; ſpatha tubum ſuperante. *G.*

IXIA *gracilis. Saliſb. Prod. Hort.* 37. *n.* 22. ?

(β) *Capillaris*; foliis cartilagineo-marginatis, ramulis 1-3 floris racemoſo-digeſtis; ſpatha tubum ſuperante. *G.*

IXIA *capillaris. Linn. Suppl.* 92. *Thunb. Diſſ.* 12. *t.* 2. *f.* 2. *prod.* 9. *Murr. Syſt. Vegetab.* 84. *Gmel. Syſt. Nat.* 109. *Willd. Sp. Pl.* 1. 201.

IXIA *lancea. Jacq. Coll. Suppl.* 13. *Ic. rar.* 2. 281. Nec vero Thunbergii.

(γ) *Aulica*; robuſtior, ramis multifloris, ſpatha tubo ſubæquata. *G.*

IXIA *aulica. Hort. Kew.* 1. *p.* 57. *Gmel. Syſt. Nat.* 109. *Willd. Sp. Pl.* 1. 207.

(δ) *Incarnata*; præcedentis magnitudine, tubo et fauce ex cylindrico anguſte turbinatis ſpatha multo longioribus, limbo hypocrateriformi-patente. *G.*

IXIA *incarnata. Jacq. Coll. Suppl.* 13. *ic. rar.* 2. *t.* 282. *Willd. Sp. Pl.* 1. 201.

Outer valve of the ſpathe ſubtruncate, ſtreaked with three brown riblike veins ending in three ſhort teeth. Segments of the corolla ſtriped with three longitudinal darker coloured veins. Our variety has frequently a ſlender hair-like one-flowered branch, giving the ſtem an appearance of being forked. In a ſucceeding number β and δ will be given in one plate, γ we have never ſeen in bloom, but in the Bankſian Herbarium

Herbarium find the ſpecimen from which the deſcription in *Hort. Kew.* was taken by one of its learned compilers, Dr. SOLANDER; perhaps this is only a leſs luxuriant variety of δ?

THUNBERG'S IXIA *lancea*, for which JACQUIN miſtook our variety β, is a very diſtinct ſpecies. All theſe varieties are ſcentleſs, and flower nearly at the ſame time, viz. in April. They are united by many others, that approach more or leſs to one or other of theſe.

This ſpecies is very diſtinct from its congeners, and although variable in ſome of its proportions, colour, and degree of expanſion, adheres faithfully to all its ſpecific diſtinctions. Thoſe who cannot be reconciled to the propriety of our reducing the above to mere varieties of the ſame ſpecies, and chooſe rather to conſider them as diſtinct, may retain the names allotted to them by the different authors.

Throughout this natural order, in which the different ſpecies and genera ſlide imperceptibly into one another, it is often impoſſible to mark the exact limits of each, and the means adopted by different authors will be found perpetually inadequate to the taſk. Thus the relative proportions of the tube to the ſpathe, and of the border to the tube, though ſometimes material, often afford no ground whatever for ſpecific diſtinction, even differing in different years in the ſame plant: ſometimes the further coheſion of the lower parts of the ſegments, or of the claws, ſtrangely alter the appearance of the flower though not the ſpecies: in this manner GLADIOLUS *hirſutus* obtains a long cylindric faux and rounded ſhort ſegments, their lower or narrower part being abſorbed in the faux, thus becoming GLADIOLUS *merianellus* of authors. So in our ſpecies the tube and faux of α, β, and γ, are gradually elongated till they become the length of the border in δ, partly by the coheſion of the baſes of the ſegments and partly by the elongation of the tube. In the ſame manner the cartilaginous margin, ſo frequent in the leaves of moſt of the natural order, can be of ſmall import for diſtinction, as its preſence or abſence often depend altogether upon the greater or leſs vigour of the plant.

Our preſent figure was taken at EDWARD WOODFORD'S, Eſq. Vauxhall.



Syd. Edwards del. Pub. by T. Curtis. St. Geo: Crescent July. 1. 1802 F. Sansom sculp.

IRIS VILLOSA. HAIRY FLAG.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Cor. 6-partita: laciniis alternis reflexis. *Stigm.* petaliformia. VIEUSSEUXIA. *De la Roche*, Descr. 31.

OBS. Species capenses corolla hexapetaloidea unguibus subdiscretis non in tubum connatis basi tantum leviter connexis, filamentis crebrius (anne semper?) plus minus coalitis gaudent. *G.*

Specific Character and Synonyms.

IRIS *villosa*; (barbata) folio extus lineatim villoso, caule pubescente involucris glaberrimis, laminis alternis minimis tridentatis filamentis cylindrico-connatis. *G.*

IRIS *tricuspis*. Var. (α) *corolla purpurea*. *Thunb. Diss. de Iride* 15. ?

Our plant differs in no respect from IRIS *tricuspis* (already published by Mr. CURTIS, in this Work, No 168, under the name of IRIS *pavonia)* except in the pubescence of leaf and stem and in colour. In making it a distinct species on that account, we follow by analogy the example of former Botanists in this natural order. It cannot be distinguished from the real IRIS *pavonia* but when in flower, and then it is sufficiently distinct. Its lower leaf, as well as those of IRIS *pavonia*, *tricuspis*, *viscaria*, *bituminosa*, *papilionacea*, *tristis*, &c. &c. appear to be radical and flat or somewhat channelled, but when examined, will be found to be cauline and fistular, having split from near the base where they are entire and round, to near the end where they terminate, as fistular ones usually do, in a solid columnar mucronate point; the surfaces are of different hues and frequently of different habits, as in our plant, where the inner is quite smooth, the outer pubescent. IRIS *tricuspis* (as are also most probably its kindred species above enumerated) is

is remarkably prone to luxuriance, forming abortive petals, or segments of petals within the claws of the larger segments of various forms, according to their greater or less perfection, and such have been mistaken by THUNBERG in IRIS *pavonia* for nectaries; he describes them, "*nectaria tria intra petala majora*, "*singulum foliolum ovatum obtusum petaliforme ad basin*;" these are sometimes present or not so in the same plant. To us it appears impossible to attribute to the union of the filaments, either in this genus or Ixia, the importance usually given it by LINNÆUS, without creating confusion and placing in distinct classes, orders, and genera, such plants as are scarcely specifically different; nor, on the other hand, are we able to lay down any rule of exception by which such compliance with the laws of his system can be avoided, especially while GALAXIA, FERRARIA, and SISYRINCHIUM, remain so separated on that ground only. This union of filaments varies exceedingly in both genera, sometimes not extending beyond the base, sometimes to the middle, sometimes the whole length. The shape of the stigma is also very subject to variation, that of IRIS *pavonia* is very distinct from our species, nor do we think that FERRARIA *undulata* can be separated from the Cape species of IRIS on that account only. DE LA ROCHE had already formed a new genus from IRIS *tricuspis*, to which he gave the name of VIEUSSEUXIA, and if the Cape species (which form a very distinct and natural section, differing in habit, as well as in not having their claws united in a tube, but very slightly connected at their base only) should be at any time detached and formed into a new genus, his name should be retained, but his character must be generalized; for, as it now stands, it would scarcely admit any species but the one from which it is formed. Our drawing was taken at Messrs. GRIMWOOD and WYKE's, who received the bulb from the Cape, and with whom we believe it has now flowered for the first time in Europe. The synonym of THUNBERG we consider to be doubtful, only because he does not notice its pubescence. Its time of flowering is a little earlier than that of IRIS *tricuspis*, viz. in April. *G.*



P. Edwards del. Pubd by S. Curtis & Geo. Croft, Jan.y 1st 1803 E. Sansom sc.

EPIDENDRUM COCHLEATUM. PURPLE-FLOWERED EPIDENDRUM.

Class and Order.

GYNANDRIA DIANDRIA.

Generic Character.

Nectarium turbinatum, obliquum, reflexum.

Specific Character and Synonyms.

EPIDENDRUM *cochleatum;* foliis oblongis geminis glabris ſtriatis bulbo innatis, ſcapo multifloro, nectario cordato. *Spec. Pl.* 1351. *Hort. Kew.* 3. 303. *Swartz. Obſ.* 329. *Jacq. Ic. rar.* 3. *t.* 605. *Cateſb. Car.* 2. *t.* 88. *And. Bot. Rep. Pl.* 13. *Mart. Mill. Dict. art.* 24.

HELLEBORINE cochleato flore. *Plum. Spec.* 9. *Ic.* 185. *f.* 2.

Of this very numerous genus, the EPIDENDRUM *cochleatum* was the firſt that was ſeen to flower in this country. It is now not very uncommon, conſidering the difficulty attending the culture of plants naturally paraſitical, a difficulty which appeared ſo great to MILLER himſelf, that he thought it unneceſſary to enumerate the ſpecies in his Dictionary, obſerving, that "they "were not by any art then known to be cultivated in the "ground." Since his time many ſpecies have been brought to flower in great perfection, five have been now figured in the Botanical Magazine, and we have drawings of ſome others.

The EPIDENDRUM is of the ſame natural order as ORCHIS and OPHRYS, and the flowers of the different ſpecies have a ſimilar ſportive variety of form. Many of them are very beautiful, and all are curious for ſome ſingularity or other.

Our drawing was made from a ſpecimen which flowered at EDWARD WOODFORD'S, Eſq. in December laſt, whoſe head gardener, Mr. WATSON, appears to us to be more than ordinarily ſucceſsful in the management of theſe plants, which

ſtamps

ſtamps a value upon every hint from him reſpecting their culture, *vide* No. 543.

The EPIDENDRUM *cucullatum* and *fragrans* have a very conſiderable reſemblance in the form of the flower; but beſides that, the former wants the fragrant ſmell of the latter, and the difference in colour, there are ſeveral remarkable diſtinctions. In *cochleatum*, the petals are nearly ſimilar, and all reflected; in *fragrans*, the petals are patent, and the two interior ones are much broader and ſomewhat ſhorter than the three exterior, and the lip of the nectary is more accuminate. Both are natives of Jamaica, and in this country muſt be conſtant inhabitants of the ſtove.

The error in No. 152 may be thus corrected.

EPIDENDRUM FRAGRANS. SWEET-SCENTED EPIDENDRUM.

Specific Character and Synonyms.

EPIDENDRUM *fragrans*; folio lato-lanceolato enervi bulbo innato, ſcapo multifloro abbreviato, labio cordato. *Swartz. Prod.* 123. *Ait. Hort. Kew.* 3. 304. *Mart. Mill. Dict. art.* 63.

Native of Jamaica: introduced to Kew garden in 1786, by HINTON EAST, Eſq. now firſt figured.

The ſynonym quoted from SLOANE belongs neither to this plant nor to EPIDENDRUM *cochleatum*, but to EPIDENDRUM *ſanguineum*. *Swartz. Prod.*



Sym. Edwards del. Pub. by T. Curtis, St. Geo. Crescent, Aug. 1 1806. F. Sansom sculp.

IXIA RADIATA. NODDING-FLOWERED IXIA.

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Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.—*Vid.* No. 566.

Specific Character and Synonyms.

IXIA *radiata*; foliis fistulosis deorsum vaginanter teretibus exinde compresso-planis linearibus, spathis adpressis, corollis cernuis: limbo retroflexo, stigmatibus flexuoso-tortis dependentibus longis. *G.*

IXIA *radiata. Jacq. ic. rar.* 2. *t.* 280. *Coll. Suppl.* 15. *Willd. Sp. Pl. v.* 1. 202. *excluso* IXIA setacea *in Syn.*

GLADIOLUS *recurvus. Thunb. Diss. p.* 9. *n.* 3. *depulsis synonymis. prod.* 8. *Herb. Linn. manu filii subscriptus, sed a* GLADIOLO recurvo *patris prorsus alienus.*

IXIA *fistulosa. Bot. Rep. tab.* 59. *ejus Recens.* IXIA radiata.

(β) *Angusta* foliis angustioribus limbo subnutante uniformiter albo. *G.*

IXIA angusta. *Willd. Sp. Pl.* 1. 202. *Indicisque univers. in coll. Jacq. apud suppl.*

IXIA linearis. *Jacq. coll.* 4. *p.* 183. *ic. rar. t.* 279. *ubi Icon bulbum jam vetustum tunicis numerosis plurimo ordine superstructis obtectum sistit; a Hayne apud. Term. Bot. tab.* 5. *in radicationis exemplo mutuatum.* G.

(γ) *Caricina* foliis angustissimis scapo capillari. *G. Herb. Banks.*

What has been said of the bulb in the article of IXIA *falcata*, No. 568, will apply to this; observing, that when we speak of the size of a bulb it is meant without its tunics, otherwise all description of it as to size and form would be useless, as these often increase according to the age of the plant, and vary, according to this increase, in outward appearance; but the bulb being produced yearly within them is generally nearly of the same size, the old one perishing either in part or altogether. Leaves 3—4, gradually longer, fistular, round till they are pierced for the emission of the scape, from thence they are flattened,

flattened, linear, and obſoletely three-nerved, but ſtill hollow, inner one longeſt, nearly reaching to the flowers, and ſheathing the whole way. Stem round, kneed, flexuoſe. Flowers 8—20, though diſtich at their baſes ultimately inclining one way, expanding about ſunſet and cloſing again before midnight; whilſt open they diffuſe a very pleaſing caryophyllaceous fragrance; in the day-time, being cloſed, they are club-ſhaped, nodding, and the outer ſegments alone are perceived. Spathe ſhorter than tube, outer valve herbaceous, rigid, ſtriated, obliquely truncated, ſtem-embracing, entirely encloſing the inner valve. Tube upright, recurved, about the length of the ſegments, greeniſh. Segments lanceolate-oblong, acute, inner ones all white, outer ones ſtreakedly coloured with brown on their outſide. Filaments dependent, ſemicylindrical; anthers ſtraight, linear, orange-coloured, ſhorter than ſtigmas. Stigmas patent, linear, finely channelled, rather ſhorter than ſegments, white. Capſule triquetral, columnar, narrow. Seeds very ſmall. Flowers in April. THUNBERG obſerves its cloſe affinity to IXIA *falcata*, though it does not prevent his making it a GLADIOLUS. JACQUIN ſays the flowers are ſcentleſs, which is only true in the day-time. He gave it the ſpecific name of *radiata*, from the edge of the baſe of the tunic being dentately or what he calls *radiately*-lacerate. We have adopted his name becauſe we found it, but think it the moſt uncertain and inexpreſſive he could have given; beſides, that this characteriſtic is often obſolete, or nearly ſo. Introduction uncertain. Our figure was taken from a ſpecimen afforded us by Mr. COLVILLE, Nurſeryman, King's-Road, Chelſea, with whom it flowers in May, propagates ſlowly, and is ſtill a rare plant. Should be carefully guarded againſt moiſture when out of flower. *G.*



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GLADIOLUS HIRSUTUS (*var.* β.) ROSE-COLOURED HAIRY CORN-FLAG.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.—*Vid.* No. 569.

Specific Character and Synonyms.

GLADIOLUS *hirsutus*; foliis subcoriaceis pilosis nervosis, corolla geniculato-nutante: tubo recto, limbo campanulato, laciniis ovato-lanceolatis sursum patulis. *G.*

(α) *Brevifolius*; bulbo jam florigero foliis spathaceis totis vaginantibus, eodem nondum florigero folio varietatum sequentium. *G.*

GLADIOLUS *brevifolius. Jacq. ic. rar.* 2. *t.* 249. *Coll.* 4. 156. *fragm. p. t. Willd. Sp. Pl.* 1. 213.

GLADIOLUS *tristis* (var. ι.) *aphyllus*, corollis albido-incarnatis quaternis secundis scapo pedali. *Thunb. Diss. No.* 8. ? *cujus varietates* κ *&* λ *huic suspicor etiam pertinere speciei. G.*

GLADIOLUS *amœnus & villosiusculus. Herb. Banks.*

(β) *Roseus*; foliis ensiformibus, corolla majuscula: laciniis lanceolato-ovalibus basi unguiculato-attenuatis fauce longioribus. *G.*

GLADIOLUS *hirsutus. Jacq. ic. rar.* 2. *t.* 250. *Coll.* 4. *p.* 161. *Willd. Sp. Pl.* 1. 214.

GLADIOLUS *carneus. Herb. Banks.*

GLADIOLUS *roseus. Bot. Rep. tab.* 11. *ejus Recens.* GLADIOLUS hirsutus.

(γ) *Tenuiflorus*; corolla graciliori laciniarum basibus in faucem cylindricam connatis: laciniis rotundato-ovatis. *G.*

GLADIOLUS *Merianellus. Thunb. Diss. n.* 11. *prod.* 7. *Willd. Sp. Pl.* 1. 214. *excluso Milleri synonymo.*

ANTHOLYZA *Merianella. Reich. Sp. Pl.* 103. *Syst. Veg.* 87. *Gmel. Syst. Nat.* 113. *excluso Milleri synonymo.* Nec vero ANTHOLYZA *Merianella*, Hort. Kew. vel. Curt. Bot. Mag. 441. Vid. retro WATSONIA *aletroides.* No. 533.

Stem

Stem ſmooth, from eight inches to near four feet high, never branched. Leaves far ſheathing, coarſely nerved, pubeſcent, and generally edged with a filiform cartilaginous border of a purple colour. Spathes ſmooth. Flowers 2—8. Faux obtuſely angular, which characteriſtic is very conſpicuous in the larger varieties; in (γ) the baſes of the ſegments are united and form a cylindrical faux, reſembling that of moſt WATSONIAS, which we preſume muſt have been the cauſe that LINNÆUS (who only ſaw it in a dried ſtate) deemed it a congener of WATSONIA (his ANTHOLYZA) *Meriana*. Limb nearly regular but ſomewhat unequal. Stamens ſhorter than limb. We have ſeen many other intermediate varieties, but have, as uſual, only enumerated the moſt ſtriking, and ſuch as many will probably reckon diſtinct ſpecies. WATSONIA *humilis*, a ſtanding ſynonym to this, is a real Watſonia, and a very diſtinct plant with ſmooth leaves. The preſent variety flowers in May, and ſmells very like the flowers of Hawthorn or May. It ſcarcely ever blows two years together of the ſame ſize or colour, varying from a deep purpliſh roſe colour to a pale pink nearly white. Much of its beauty depends upon ſkilful cultivation. Mr. WILLIAMS, Nurſeryman, at Turnham-Green, has an exceeding large variety without the purple edge to the leaves. Is at all times very impatient of moiſture. Was moſt probably introduced among our Nurſerymen by the way of Holland; we have ſeen many ſpecimens of it among the late Cape arrivals. Our figure was taken at Meſſrs. GRIMWOOD and WYKE's, Kenſington, where it flowered in great perfection. G.



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TRICHONEMA CRUCIATUM. CHANNEL-LEAVED TRICHONEMA.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Spatha bivalvis: valvulis lanceolatis acuminatis integris. *Cor.* 6-partita æqualis tubo breviſſimo. *Fil.* erecta, piloſa, brevia. *Stigm.* 3, bipartita. *Sem.* plurima, rotunda. G.

OBS. *Bulbus conicus baſi oblique ſemitruncatus, radicem deſcendentem craſſam carnoſam demittens. Scapus teres ſub floreſcentia ſæpius ſubterraneus; jamprimum ſub fructificatione e terra proveniens, ſurſum in ramos binos ſemiteretes, folio longiori ſtipulatos, bipartitus. Vid.* Bot. Rep. tab. 170. *quæ ſpecies adhucdum florifera ſcapum jam emiſit. Ramus alter ſæpe deficit. Genus* CROCO *maxime affine.* G.

Specific Character and Synonyms.

TRICHONEMA *cruciatum*; foliis ſubtetraquetris utrinque tricoſtatis: coſta media elevata latiore, corollis erectis: laciniis acutis recurvo-patentibus, antheris ſtigmata æquantibus. G.

IXIA *cruciata. Jacq. ic. rar.* 2. *t.* 290. *Coll. Suppl. p.* 16. *Wild. Sp. Pl.* 1. 197.

IXIA *Bulbocodium*, var. 7. corollis roſeis. *Thunb. Diſſ.* 3.

IXIA *roſea* β. *Herb. Bankſ.*

Dr. DRYANDER, by a manuſcript note in the Hort. Kew. of the Bankſian library, has moſt diſtinctly ſettled the difference between the IXIA *roſea* of the Cape (publiſhed already in this work, No. 265, by Mr. CURTIS, under the name of IXIA *Bulbocodium)* and the real IXIA *Bulbocodium*, an European ſpecies. To the firſt our plant approaches very cloſely, but we follow JACQUIN in making it a diſtinct ſpecies, as we believe it to be; beſides ſome difference in the form of the leaves and ſtem, the ſpathe of this is more membranaceous,

the

the ſtigmas nearly the length or ſhorter than the anthers, not longer, as in *roſea*. A tranſverſe ſection of the leaf of JACQUIN's ſpecimen, a much ſtronger plant than ours, affords the cruciate form from which he derives the ſpecific name. We are perſuaded that LINNÆUS adopted the name of *roſea* from one of the figures in MILLER's plates, where three ſpecimens are given, two coloured blue or purple and one pink or roſe, though the ſpecies is deſcribed as light purple in the letter-preſs and no mention made of the roſe-coloured variety. The above inaccurate plate with MILLER's deſcription, was moſt probably all that LINNÆUS had for a guide, hence his unſatisfactory deſcription and the confuſion it has ſince produced. JACQUIN is incorrect in deſcribing the corolla as hexapetalous, as it has a ſhort tube; he might with propriety have called it hexapetaloid. Our generic name is from θρίξ *pilus* and νημα *filum*, the filaments being hairy. Its ſpecies, already deſcribed or figured, are IXIA *Bulbocodium*, *Linn. Syſt.* 83. IXIA *roſea*, *Linn. Syſt. ed.* 13. 75. IXIA *cruciata*, *ſupra*. IXIA *chloroleuca*, *Jacq. Coll.* 4. 180. IXIA *Bulbocodium*, *Bot. Rep.* 170. IXIA *humilis*, *Thunb. Diſſ.* 4. *prod.* 9. ? IXIA *pudica*, *Herb. Bankſ.*— More are known to us, but we ſhall reſerve them for further examination from living ſpecimens. Dr. DRYANDER is perſuaded that there are ſeveral ſpecies even in Europe. The genus ſeems to be intermediate between CROCUS and IXIA, perhaps the link that joins them; when we have laid a larger portion of this tribe before the public, we ſhall then attempt to ſhew the mutual connection of the genera that compoſe it, with ſome further obſervations on them. This ſpecies flowers about May. Our drawing was taken from the rich collection at GEORGE HIBBERT's, Eſq. Clapham, who received it by his collector from the Cape; it flowered alſo this year at Mr. COLVILLE's, who had it from Holland, under the name of an Amaryllis. Found by THUNBERG in various parts round Cape-Town, flowering in our ſummer months. *G.*



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BABIANA PLICATA. SWEET-SCENTED BABIANA.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Spatha trivalvuloidea, valvula intima bipartita. *Cor.* basi tubulosa, limbus 6-partitus. *Stigm.* 3, recurvo-patentia e canaliculato explicata. *Caps.* rotunda, torulosa. *Sem.* pauca angulata. G.

OBS. *Bulbus elongato-conicus tunica fibrosa involutus, sæpius alte subterraneus Folia plicata, e petiolis erectis submembranaceis linearibus convolutis subbelloidee explicata, utrinque acuminato-contracta, sæpius pubescentia, nervi compares nullo præcipuo vel medio. Corolla tubi longitudine et laciniarum situ mire ludit. Stamina nunc adscendentia et parallela nunc erecta et trifariam spectantia. Capsula sæpius (semperne ?) pubescens. Ab* IXIA, WATSONIA, ANTHOLYZA, *et* GLADIOLO, *præterquam habitu, spatha imprimis discrepat.* G.

Specific Character and Synonyms.

BABIANA *plicata*; foliis oblongo-lanceolatis molliſſimis laxe plicatis villosis, limbo bilabiato-patente: laciniis subæqualibus tubo subæquatis alternis subundulatis, genitalibus adscendentibus. G.

GLADIOLUS *plicatus. Thunb. Diss.* 24. *prod.* 10. *Hort. Kew.* 1. 63. *Burm. prod.* 2. ? Nec vero Linn. vel Jacq. Ic. rar. vel Coll.

GLADIOLUS *fragrans. Jacq. Hort. Schoenb. p.* 7. *tab.* 14. Sisyrinchium latifolium floribus patentibus vix diffformibus. *Breyn. prod.* 3. *p.* 22. *t.* 9. *f.* 2.

IRIS africana versicolor pumila plicatis et hirsutis foliis radice bulbosa. *Pluk. mant.* 424. *f.* 8. ?

GLADIOLUS *plicatus* (α) flore variegato suaveolente. *Soland. MSS. Banks.*

The species of this natural order having been usually determined from herbariums only, many synonyms have in consequence been heaped under the present head, which belong to what

what are now eſteemed diſtinct ſpecies; we have only reſerved ſuch as appear to us really to belong to this ſpecies, and ſhall apply the others as we publiſh the plants for which we conceive they were intended. MILLER's plant, figured in the 155th plate, uſually quoted as a ſynonym to this, is we believe the GLADIOLUS *ſtrictus* of *Hort. Kew.* The whole plant, except the corolla, is pubeſcent and very tender, from ſix inches to a foot high. Flowers emit a pleaſing caryophyllaceous fragrance. Cultivated, according to the Bankſian Herbarium, at Kew-Gardens in 1778. We venture to predict that this genus will turn out one of the moſt numerous of the whole natural order. For the derivation of the generic name, and an enumeration of ſuch ſpecies as are as yet deſcribed, revert to IXIA *conica*, No. 339 of this work. From this liſt GLADIOLUS *criſpus* ſhould be excluded. THUNBERG enumerates many varieties from dried ſpecimens, which will nearly all be found to be diſtinct ſpecies. Found by him at the Cape, on the loweſt hills beneath the weſt ſide of Leuwebild near the ſhore, near Cape-Town, in Swartland-Rode-Sand, and other ſpots, in great abundance. Flowers with us in May. Our drawing was taken at Meſſrs. WYKES and GRIMWOOD's, Kenſington. G.



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IRIS TRISTIS DULL-COLOURED FLAG.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Cor. 6-partita: petalis alternis reflexis. *Stigmata* petaliformia.

Specific Character and Synonyms.

IRIS *triſtis*; (imberbis) foliis anguſto-lanceolatis nudis glaberrimis, caule ramulis et pedicellis villoſis, petalorum laminis oblongis obtuſis: alternis duplo anguſtioribus, filamentis baſi connatis. *G.*

IRIS *triſtis. Thunb. Diſſ.* 39. *prod.* 12. *Linn. Suppl.* 97. *Willd. Sp. Pl.* 1. 239.

MORÆA *ſordeſcens. Jacq. ic. rar.* 2. *t.* 225. *Coll. Suppl.* 29.

MORÆA *tricolor. Bot. Rep. tab.* 83. *ejus Recenſ.* Iris *triſtis.*

Root a ſmall round tunicated bulb. Leaves of the ſame habit as thoſe of IRIS *villoſa* of the foregoing number, but much broader and quite ſmooth. Stem from ſix inches to a foot high, uſually branched, terminated, as is alſo each branch, by a general bivalved involucre, from which iſſue in ſucceſſion two, three, or four flowers, on ſeparate pedicles, with ſeparate one-valved, convolute, membranaceous ſpathes. We have obſerved, that in all the Cape ſpecies of this family, when only one flower is produced from the general involucre, it is nearly twice the ſize of thoſe when the uſual number is produced. In all the Cape ſpecies of FERRARIA and IRIS, as yet known to us, the flower, after the parts of fructification have completed their operations, forms itſelf into a kind of ball, the ſegments rolling inwards previous to its final decay; whereas, in MORÆA and ARISTEA, the genera neareſt to this, the flowers commence their decay by twiſting the ſegments ſpirally into a kind of column. Our ſpecies was found at the Cape, by THUNBERG, below the Duyvelſberg near the town. It ſeeds freely, and produces plenty of offſets. The drawing was taken

taken from a plant that flowered in May, at Meſſrs. GRIMWOOD and WYKES's, Kenſington, and was moſt probably introduced amongſt us by the way of Holland; Mr. HIBBERT's ſpecimen, figured in the Botaniſt's Repoſitory, came immediately from the Cape.

While "*laciniis alternis reflexis*" remains a part of the eſſential character of IRIS, nearly all the Cape ſpecies ought in ſtrictneſs to be excluded, and this we imagine has been the cauſe that ſome of them have been transferred to *Moræa*, with which they agree, in having "*petala tria interiora patentia, anguſtiora*," but differ, according to us, from true MORÆAS, in having petal-ſhaped ſtigmas and upright claws or baſes to their ſegments or petals. If therefore theſe are to be retained under IRIS, the eſſential character muſt be altered; but it appears to us more convenient that they ſhould be formed into another genus, diſtinguiſhed from IRIS in not having the claws or baſes of the ſegments united into a tube, but in having them nearly upright and parted. *G.*



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GLADIOLUS RECURVUS. VIOLET-SCENTED CORN-FLAG.

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Claſs and Order.

TRIANDRIA MONOGYNIA.

Generic Character.—Vid. No. 569.

Specific Character and Synonyms.

GLADIOLUS *recurvus;* foliis linearibus, planis: nervo utrinque prominente, corolla campanulato-ringente lateraliter compreſſula: laciniis extimis lanceolatis recurvis: lateralibus infimis ſubcuneatis. *G.*

GLADIOLUS *recurvus. Linn. Mant.* 28. *Reich.* 1. 101. *Syſt. Vegetab. Murr.* 86. *Gmel. Syſt. Nat.* 110. *Willd. Sp. Pl.* 1. 208. Nec vero THUNB. aut LINN. fil.

GLADIOLUS *carinatus. Hort. Kew.* 1. 64. *Gmel. Syſt. Nat.* 7. 111. *Willd. Sp. Pl.* 1. 211.

GLADIOLUS *punctatus. Jacq. ic. rar.* 2. *t.* 247. *Coll.* 4. *p.* 160.

GLADIOLUS *triſtis.* (var. γ.) *punctatus odorus. Thunb. Diſſ. de Glad.* 12.

GLADIOLUS foliis linearibus ſulcatis, floribus uno verſu diſpoſitis tubo floris longiore. *Mill. ic.* 157. *t.* 235. *fig.* 2.

GLADIOLUS *alatus. Schneev. & Geuns. tab.* 12. *Uſt. ann. Bot. St.* 6. *p.* 98.

GLADIOLUS *odorus. Saliſb. prod. Hort.* 40.

GLADIOLUS *ringens. Bot. Rep. tab.* 27. *iterum tab.* 227. *ejus Recenſ.* GLADIOLUS carinatus.

Root-ſheath gloſſy like porcelane, colour a white ground beautifully mottled with purpliſh brown. Leaves 3, outer one nearly the height of the ſtem, inner far ſheathing, upper cauline and ſpathaceous. Sometimes the leaves are ſcarcely half the length of the ſtem, as in JACQUIN's figure. Stem 1—3 feet high, ſlender, upright. Flowers 2—5, produced about April, ſmelling very powerfully like violets or orris-root.

Spathes

Spathes about half the length of the corolla, much longer than tube. Upper ſegment broadeſt, elliptic, recurved, lower ones ſubunguiculate. On the firſt and ſecond day of its expanſion, the upper parts of the ſegments, if cloſely obſerved, will be found to have a yellow ground, ſo thickly beſet with minute blue dots, as to give the appearance of a uniform blue, of which colour they really at laſt become. Stigmas longer than the anthers. It approaches very near to GLADIOLUS *gracilis* in corolla, but differs eſſentially in the leaf, as may be ſeen by their ſpecific characters; this laſt is alſo ſcentleſs, and wants the mottled root-ſheath. The plant in the Herbarium of the younger LINNÆUS, and deſcribed in the Diſſertation of THUNBERG, under the name of GLADIOLUS *recurvus*, is the IXIA *radiata* of this number; how it came to be made a ſynonym to ſo very diſtinct a ſubject as this we cannot account. We ſuſpect, however, that the real GLADIOLUS *recurvus*, as well as the GLADIOLUS *undulatus* of LINNÆUS, has never been known to any author that we have conſulted, if we may judge from the ſynonyms and the different names it has repeatedly received. Both ſpecies are intereſting, as being of the very few of this family deſcribed by LINNÆUS himſelf; and notwithſtanding the reaſons adduced in No. 538 for continuing it to JACQUIN's plant, we now regret that we did not preſerve his name of *undulatus* for the plant to which he had given it, which will appear in our next number. Raiſed by MILLER from Cape ſeeds; flowered in the Cheſſea garden before the year 1760. Introduced into Kew garden by Mr. MASSON, in 1774, where it received the name of *carinatus*, from the appearance of the midrib of its leaves. MILLER's figure is, we believe, erroneous in repreſenting it as branched, which, we are almoſt certain, it never is; very probably two cloſe-growing plants afforded that appearance to the draughtſman. His deſcription is correct and full. THUNBERG mentions a variety with corollas of a pinkiſh or fleſh-coloured hue. It is the moſt fragrant of the genus; ſomewhat impatient of moiſture when out of flower; never fails to bloom when the bulb is of a proper age. There is no ſpecimen of this or *undulatus* in the Herbarium of the elder LINNÆUS. Our drawing was taken at the nurſery of Meſſrs. GRIMWOOD and WYKES's, Kenſington, with whom it generally flowers in April and May. G.

S. Edwards del. Pub. by T. Curtis St. Geo: Crescent Aug.ª 1.ª 1792 F. Sansom sculp.

PELARGONIUM PINNATUM. PINNATED CRANE'S-BILL.

Class and Order.

MONADELPHIA HEPTANDRIA.

Generic Character.

Cal. 5-partitis: lacinia suprema desinente in tubulum capillarem, nectariferum, secus pedunculum decurrentem. *Cor.* 5-petala irregularis. *Filam.* 10 inæqualia, quorum 3 (raro 5) castrata. *Fruct.* 5-coccus, rostratus: *rostra* spiralia introrsum barbata.

Specific Character and Synonyms.

PELARGONIUM *pinnatum*; acaule, umbella subcomposita, foliis pinnatis: foliolis subrotundo-ovatis indivisis utrinque hirsutis. *L'Herit. No.* 14. *Ait. Hort. Kew.* 2. 417. *L'Herit. Geranial. t.* 8.

GERANIUM *pinnatum. Sp. Pl. ed.* 1. *p.* 677.

GERANIUM *prolificum* (γ.) pinnatum. *Sp. Pl. ed.* 2. *p.* 950.

GERANIUM astragalifolium. *Cavan. Diss.* 4. *p.* 257. *n.* 377. *t.* 104. *f.* 2. *a Commelini prælud. mutuata. Jacq. ic. v.* 2. *t.* 93.

GERANIUM africanum astragalifolio. *Commel. præl.* 53. *t.* 3.

Root tuberous. Leaves radical, from six inches to a foot and half in length, pinnated, hairy, hairs of a silvery hue, covering the mid-rib and both sides of the leaf; leaflets varying extremely in form and manner of growth, numerous irregularly alternate, ovate, and obtuse, or ovate-lanceolate, mostly standing on footstalks, sometimes sessile, the terminating one usually largest; sometimes from the base of one of the leaflets springs a small leaf, and sometimes they grow as it were four together; indeed it is impossible to describe all their variations. Flowering stem 6—12 inches and taller, round, hairy, a little thickened just

juſt below the umbel, uſually throwing out two other flowering branches from the ſame part of the ſtem. Flowers 10—15 in an umbel. Involucrum conſiſting of as many leaves as there are flowers, one being ſituated at the baſe of each peduncle, about one-third of an inch long, ſubulate, hairy. Peduncles nearly an inch and half long. Calyx conſiſting of five lanceolate ſegments nearly equal, four of them uſually reflexed, hairy. Petals buff-coloured, narrow, ſomewhat undulated, dilating gradually from the baſe towards the apex; the two uppermoſt ſomewhat the longeſt and largeſt, and very prettily ſtreaked with crimſon. Five fertile ſtamens. Anthers inclining to orange. Stigmas crimſon.

We have followed the Hortus Kewenſis in conſidering the *pinnatum* of LINNÆUS and *aſtragalifolium* of JACQUIN as the ſame ſpecies. There are, however, remarkable varieties, and future obſervations may perhaps ſeparate ſome of them into diſtinct ſpecies.

Our figure was taken from a plant, which flowered in December 1798, in the Marquis of BLANDFORD's collection, at White-Knights, near Reading, and was raiſed there from Cape ſeeds, ſent by Lord MACARTNEY. Introduced to the Kew garden, by Mr. MASSON, ten years before. It is of the tenderer kind, and, like other tuberous rooted ſpecies, is impatient of water, and not eaſily propagated, except by ſeeds, which it rarely or never produces with us. In ſtrong plants the bulb will however branch out at top into two, three, or more diſtinct heads; by dividing theſe with caution, ſo that each part ſhall have ſome fibres to it, and not giving them too much water when planted, Mr. DOWDALL, at that time Gardener to the Marquis, told Mr. CURTIS, that this rare ſpecies might be increaſed,

ERICA GLAUCA. GLAUCOUS HEATH.

Clafs and Order.

OCTANDRIA MONOGYNIA.

Generic Character.

Cal. 4-phyllus. *Cor.* 4-fida. *Filam.* receptaculo inferta. *Antheræ* bifidæ. *Capf.* 4-locularis.

Specific Character and Synonyms.

ERICA *glauca;* antheris criftatis, foliis ternis acerofis glaucis, pedunculis terminalibus aggregatis bracteatis nutantibus, calycibus fimplicibus patentibus corollas ovatas acutas fubæquantibus.

ERICA *glauca. And. Eric. n.* 47. *Salifb. in Act. Soc. Linn. v.* 6. *p.* 352.

This makes a very handfome fhrub, growing to the height of three feet or more; but as it will not flower till it has acquired a confiderable fize, and is of flow growth and propagated from feeds only, few perfons have had an opportunity of feeing it in flower; on this account, perhaps, the bracteæ, calyces, and corolla have been erroneoufly defcribed as being all of a livid-purple colour, which correfponds indeed with Mr. ANDREWS's figure above quoted, but does not accord with nature, the corolla only being of a purple colour and the other parts of a brick-duft red. The parts of fructification are entirely enclofed in the corolla, the anthers are what LINNÆUS calls criftated, that is, each lobe has an appendix at its bafe, compared to the comb of a cock, being flat and ferrated at the edges. Appears to us to approach neareft to ERICA *baccans*, No. 358 of this work; but is eafily diftinguifhed from every other fpecies by the remarkable large coloured bracteæ and fpreading calyx. Our drawing was taken from the fineft fpecimen we have ever feen, in the collection of GEORGE HIBBERT, Efq. which has unfortunately fince perifhed.



S. Edwards del. Pub. by I. Curtis St. Geo[illegible] Aug.t 1802 F. Sansom sculp.



TRITONIA SQUALIDA. SWEET-SCENTED TRITONIA.

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Claſs and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Spatha bivalvis ſcarioſa. *Corollæ* faux turbinata: limbus ſexpartitus: laciniæ unguiculatæ. *Stam.* inclinata (*nunquam erecta*) filamenta curva. *Stigm.* 3, recurvo-patentia. *Capſ.* ovato-rotunda. *Sem.* numeroſa, globoſa. *G.*

OBS. Bulbus involutus tunica reticulata, maculis ſæpius majuſculis. Folia glaberrima, iridioidea. Spatha integra vel apice denticulata et fuſceſcens. Flores majuſculi plures. Corollæ limbus regularis vel bilabiatus et ſubirregularis vel etiam reſupinato-bilabiatus: laciniæ ſæpius æquales vel unica fere duplo major vel tres inferiores ſed rarius minores, modo unica modo tres alternæ ad baſin gibbæ, modo cunctæ conformes. Stamina in bilabiatis adſcendentia, in regularibus aſſurgentia, vel etiam adſcendentia et aſſurgentia in diverſis floribus ejuſdem plantæ. Filam. ſemper curva. A *Sparaxide* diſcrepat ſpatha haud partito-lacera, axillis foliorum non bulbiferis; a *Gladiolo* feminibus non alatis. *G.*

Specific Character and Synonyms.

TRITONIA *ſqualida*; foliis laxioribus extimis obtuſiuſculis, limbo æquali: lacinia unica baſi urceolato-gibba: unguibus margine hyalinis: laminis rotundatis, ſtigmatibus ſtamina ſuperantibus *G.*

IXIA *ſqualida.* var. (α) *Hort. Kew.* 461. *Gmel. Syſt. Nat.* 2. 109. *Willd. Sp. Pl.* 1. 206.

IXIA *lancea.* *Thunb. Diſſ. n.* 21.? *Prod.* 10.? *Syſt. Vegetab. Murr.* 85.? *Syſt. Nat. Gmel.* 110.? *Willd. Sp. Pl.* 1. 206.? Nec Jacquini.

IXIÆ *crocatæ* var. *Burm. Prod. Fl. cap.* 1. *Houtt. Linn. Pſt. Syſt.* 11. 35.

IXIA *ſimilis. Saliſb. Prod. Hort.* 38. *n.* 28.

The preſent ſpecies, although too cloſely allied to TRITONIA (Ixia) *crocata*, No. 184, differs in having outer leaves

leaves rather more blunt and falcate, corolla ſmaller and leſs patent, veins more prominent, laminas narrower, more rounded, often retuſe and incurved, claws leſs hyaline; beſides in ſmelling very ſweet, whereas *crocata* is perfectly ſcentleſs. In the Hort. Kew. the TRITONIA (Gladiolus) *lineata*, Bot. Mag No. 487, is made a variety of this; but upon what foundation we know not, as beſides the numerous differences above ground the habits of the bulbs are very diſtinct; in TRITONIA *lineata*, though it becomes effete, the bulb does not entirely periſh till the ſecond year after flowering, while in our plant it completely diſappears before the ſeed is ripe. DE LA ROCHE, in his *Deſcr. nov. plant n.* 13. *p.* 24. in a note on TRITONIA *crocata*, his IXIA *iridifolia*, declares himſelf at a loſs whether to allot it to IXIA or GLADIOLUS, notices the declined poſition of the parts of fructification and the curvature of the ſtamens, which he deſcribes by the word *ſigmoidea* (ſigmalike). We have founded the genus on the following deſcribed ſpecies, viz. IXIA *crocata*, *Linn. Bot. Mag. No.* 184. IXIA *feneſtrata*, *Jacq.* IXIA *miniata*, *Jacq.* IXIA *ſqualida*, *Hort. Kew.* IXIA *deuſta*, *Hort Kew.* GLADIOLUS *lineatus*, *Saliſb.* (*Bot. Mag. No.* 487. IXIA *ſqualida* β. *Hort. Kew.*) GLADIOLUS *ſecuriger*, *Hort. Kew. Bot. Mag. No.* 383. GLADIOLUS *flavus Hort. Kew.* GLADIOLUS *refractus? Jacq.* Name derived from *Triton*, in the ſignification of a vane or weathercock, in alluſion to the variable direction in the ſtamens of the different ſpecies. We have not adopted THUNBERG's trivial name of *lancea*, for although, taking circumſtances together, we have little doubt but this is his plant, yet the deſcription is far too vague to apply with certainty to any ſpecies. Flowers in May. Introduced by Mr. MASSON, in 1774. Our figure was drawn at the nurſery of Meſſrs. GRIMWOOD and WYKES, Kenſington. G.

GLADIOLUS CUSPIDATUS. TALL CORN FLAG.

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Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.—Vid. No. 569.

Specific Character and Synonyms.

GLADIOLUS *cuspidatus;* corolla semiringenter-infundibuliformi; tubo filiformi spatha limbove duplo longiore, laciniis longe attenuatis recurvis undulatis; infimis duplo angustioribus. *G.*

GLADIOLUS *cuspidatus. Jacq. ic. rar.* 2. *t.* 257. *Coll. Suppl.* 17. *Willd. Sp. Pl.* 1. 210. *Bot. Rep. tab.* 219.

GLADIOLUS *undulatus. Linn. Mant.* 27. *Syst. Veg. Murr.* 86. *Reich.* 1. 101. *Houtt. Linn. Pfl. Syst.* 11. 59. *Gmel. Syst. Nat.* 110. exclusо synonymo.

GLADIOLUS *tristis.* var. (o) *hastatus,* corollis albo incarnatis macula hastata. *Thunb. Diss. de Glad.* 13.?

Leaves ensiform, generally shorter than the stem, and narrow in proportion to their height. Stem 2—3 feet high, erect, round. Tube filiform, straight, nearly twice the length of the spathe, above which it is gradually enlarged into a faux; segments lanceolate, far-attenuate, much shorter than tube, and generally waved, upper ones broadest, uppermost nearly straight, recurved at the end. Flowers vary much in colour and in the form of the mark on the lower segments, which is sometimes obsolete as well as the undulation. Our reasons for not having restored LINNÆUS's specific name of *undulatus* to this species may be seen No 538 of this work, though we now wish we had retained the trivial name of *augustus,* given by THUNBERG for that, and LINNÆUS's for this.—The latter, in his *Mantissa,* fixes upon this species as the link that unites Gladiolus and Ixia, which he would hardly have done had he seen the numerous species that have been since discovered, many of which seem to approach much nearer to Ixia. This magnificent species is a native of the Cape, flowers in May and June. Our drawing was taken from the collection of Messrs. GRIMWOOD and WYKES, at Kensington. Its time of introduction uncertain; but since the publication of *Hort. Kew.* G.

Syd. Edwards del. Pub. by T. Curtis, St. Geo: Crescent Sep. 1. 1802 E. Sowerby

BABIANA VILLOSA. CRIMSON BABIANA.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.—Vid. No. 576.

Specific Character and Synonyms.

BABIANA *villosa*; spatha tubo subæquata, corolla regulari: laciniis oblongis obtusis, stigmatibus linearibus antheras crassas majusculas subæquantibus. G.

IXIA *villosa*. *Hort. Kew.* 1. 58.

IXIA *punicea*. *Jacq. ic. rar.* 2. *t.* 287. *Coll. Suppl.* 12. *Willd. Sp. Pl.* 1. 198.

IXIA *flabelliformis*. *Salisb. Prod. Hort.* 37. *n.* 23.

GLADIOLI *plicati*. var. purpurea. *Thunb. Diss. n.* 24.

Stem declined. Flowers scentless. Outer segments of the corolla are traversed by a hairy subcarinate line on the outside, and terminated by a small mucro. Anthers deep violet or black, at first surrounding the stigmas, but ultimately inclining to a parallel front, though not ascendent.

Differs from BABIANA (IXIA) *rubro-cyanea*, No. 410 of this work, chiefly in not having the stigmas so broad and rounded, nor so markedly curled and fringed.—Are they really distinct species?

Our figure was taken at the nursery of Mr. COLVILLE, King's-Road.

Flowers in May. Introduced into Kew garden by Dr. PATRICK RUSSELL, in 1778.* *G.*

* Hort. Kew.



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IXIA EXCISA. DWARF IXIA.

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Claſs and Order.

TRIANDRIA MONOGYNIA.

Generic Character.—Vid. No. 566.

Specific Character and Synonyms.

IXIA ***exciſa*** ; rachi dichotomoideo-flexuoſa, ſpatha herbacea naviculari glaberrima; floribus remotiuſculis erectiſſimis: limbo rotato-patente; ſtigmatibus revolutis fimbriato-piloſis antheras ſupereminentibus. *G.*

IXIA *exciſa. Thunb. Diſſ. n.* 24. *tab.* 1. *fig.* 4. *Prod.* 10. *Linn. Suppl.* 92 quoad varietatem ſecundam, prior enim Gladiolum (nobis Lapeyrouſiam) *junceum* ſpectat. *Syſt. Veg. Murr.* 85. *Gmel. Syſt. Nat.* 110. *Willd. Sp. Pl.* 1. 207.

IXIA *ovata*, foliis radicalibus binis ovatis connatis, ſcapo in ſummitate inflexo. *Planta ſeſquipalmaris, foliolo ad ſcapi diviſuram oblongo, qui a flore ad florem inflectitur et inſtar dichotomiæ adparet; flores in ſummitate albi et violacei. Burm. Fl. cap. Prod.*

Bulb round, ſmaller than a pea, tunic brown, hard, baſe obliquely ſemitruncate. Radical leaves two, three times ſhorter than the ſtem, narrow-ovate, ſub-coriaceous, diſtich, ſubfalcate, very ſmooth, rather ſhining, with a ſlight exciſion towards the baſe, and the middle nerve nearly obſolete. Stem ſtiff, round, flexuoſe, 2—4 inches long, generally with a cauline leaf. The ſpike has the appearance of a dichotomous inflorescence, owing to the rachis being ſtrongly flexuoſe and the flowers riſing ſtraight from the angle of the bends or knees, ſeem as if each terminated a diſtinct peduncle. Spathe ſhorter than the tube, outer valve very ſmooth, conduplicate, keeled, ſlightly bifid. Flowers 4—6, large in proportion to the bulb. Tube ſtrict, thickiſh, fleſhy, obſoletely triquetral,

triquetral, longer than the ſegments, which are oblong, oval, ſlightly pointed, ſomewhat concave, nearly equal, white on the inſide, with a twin cinnamon-coloured ſtain at the baſe, on the outſide ſtreaked with the ſame coloured veins, the three outermoſt moſt ſo. Filaments erect, longer than the anthers, diſtinct or ſomewhat remote but not patent, forming a kind of open-work column; anthers ſagittate, upright, ſhort, brown. Style as long or longer than the ſtamens; ſtigmas revolute, hanging over the anthers, from complicate explanate, pubeſcently fringed, lucid. Expands about eight o'clock in the morning, and continues open as long as the ſun ſhines upon it. Quite ſcentleſs. The younger LINNÆUS ſeems to have confounded a variety of GLADIOLUS (our LAPEYROUSIA) *junceus* with it, as the latter variety only of the plant he deſcribes applies to our ſpecies.—Spathe and corolla bear a ſtrong *prima facie* reſemblance to IXIA *falcata*. Found by THUNBERG on the hills round Cape-Town; his figure is characteriſtic.

Our drawing was taken at the garden of GEORGE HIBBERT, Eſq. Clapham (by whom it was introduced) where alone, we believe, it is to be found in this country.

Our ſpecimen agrees in ſize with the many dried ſpontaneous ones we have ſeen, and does not appear to have been the leaſt altered by cultivation. Propagates by offsets with the uſual facility of its congeners, by which they will all ſoon become very common, eſpecially as they are of ſuch eaſy culture.

Flowers in April and May. *G.*



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STAPELIA GRANDIFLORA. GREAT-FLOWERED STAPELIA.

Class and Order.

PENTANDRIA DIGYNIA.

Generic Character.

Contorta. *Nect.* duplici ſtellula tegente genitalia.

Specific Character and Synonyms.

STAPELIA *grandiflora ;* ramis quadrangularibus clavatis: angulis dentatatis: dentibus remotis incurvatis, corolla magna plana quinquefida: laciniis lanceolatis acutis margine ciliatis. *Maſſon. Stap. p.* 13. *n.* 11. *t.* 11.
STAPELIA *grandiflora. Willd. Sp. Pl.* 1. 1278.

This STAPELIA has the largeſt flowers of any of the whole genus, the corolla meaſuring, when fully expanded, in the ſpecimen from which our drawing was taken, ſix inches in diameter, and is equally offenſive to the ſmell as any of its congeners. More nearly allied to STAPELIA *hirſuta* than to any other; but beſides a conſiderable difference in the branches, is diſtinguiſhed by ſegments more acute and covered with hairs to a greater extent; not only the centre of the flower, as in *hirſuta*, but more than half the ſegments, being thickly clothed with a felt of fine ſoft ſilky hairs of a reddiſh purple colour. The tips of the flower are of a very black purple colour and naked, except the fringe on the edge, which alſo ſurrounds the reſt of the flower,

flower, and conſiſts of very long white ſilky hairs, growing from a narrow margin in one rank, but alternately reclining in different directions, chiefly diſtichwiſe; whereas in *hirſuta*, the ciliæ grow on a broader margin, conſtituting a thicker but much ſhorter fringe. The parts of fructification, which vary ſo much in the different ſpecies, though ſufficiently different in form to mark a diſtinct ſpecies, are very ſimilar to thoſe of *hirſuta*, well figured and deſcribed by JACQUIN in his *Miſcellanea Auſtriaca*, *tom.* 1. *p.* 28. *tab.* 3. We are however by no means convinced that the APOCINEÆ *Juſſ.* to which order Stapelia belongs, ſhould be referred to the claſs decandria, but conſider them rather as having five two-lobed anthers, with the lobes diſtinct; we would therefore retain them in the claſs pentandria for juſt the ſame reaſon that Prof. SWARTZ has conſidered the Orchideæ to be really monandrous, though arranged by LINNÆUS as diandrous.

Culture the ſame as for the reſt of the genus, ſee No. 536. It does not flower ſo readily as many of the others, the buds being very apt to die off, even when far advanced.

Found by MASSON at the Cape of Good Hope, near Sondags Rivier.

Our drawing was taken in December, from a ſpecimen communicated by Mr. LODDIGES, Nurſeryman at Hackney, who has a large collection of Stapeliæ.

N°586



Syd Edwards del.

Pub by T. Curtis St. Geo Crescent Sep. 1. 1802

GLADIOLUS ALATUS. WING-FLOWERED CORNFLAG.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.—Vid. No. 569.

Specific Character and Synonyms.

GLADIOLUS *alatus*; foliis rigidis denſe ſtriatulis, ſpathis ſubventricoſis decurrentibus, corollæ lacinia ſuprema cuneato-lanceolata plana erecto-recurva: lateralibus latiſſimis ovato-rhombeis: infima ſpatulato-rhombea. G.

GLADIOLUS *alatus. Sp. Pl.* 53. *Amæn. Acad.* 6. *Afr.* 2. *(excluſo ſynonymo Pluken.) Thunb. Diſſ. n.* 15. *var.* 3. Nec GLADIOLUS *alatus* Hort. Kew. aut Jacq. ic. rar. vel coll.

GLADIOLUS flore ſingulari miniato, inferioribus laciniis luteo-viridibus. *Breyn. Prod. p.* 25. *t.* 12. *f.* 2. *Seb. Theſ.* 1. *t.* 7. *f.* 3.

GLADIOLUS. *Herb. Gronov. apud Herb. Bankſ.*

GLADIOLUS *galeatus. Burm. Prod. cap.* 2. *?*

GLADIOLUS *alatus. Bot. Rep. tab.* 8. *ejuſque Recenſ. No.* 14.

Bulb round, compreſſed. Leaves 3—4, enſiform-linear, ſtiff, ſomewhat coriaceous, outermoſt one bluntiſh, nearly equal with the ſcape, twice the length of the others, all without a chief or middle nerve, ſtreaked with cloſe parallel fine furrows. Stem 6—8 inches high, upright, flexuoſe, ſemiancipital. Spathe much longer than tube, exterior valve ventricoſely-concave, ſomewhat keeled, ſtem-embracing, decurrent, the margins of which projecting ſomewhat beyond the ſtem give it ſomething the appearance of being winged. Flowers 5—10, divaricately ringent, patent. Tube ſhort, turbinate,

turbinate, ſegments equal in length, uppermoſt one twice narrower than its lateral ones, lower ones narrower, far-attenuate downwards or clawed. Parts of fructification nearly of one length, arched-adſcendent. Filaments flattened. Flowers ſmell like ſweet-briar. Being the GLADIOLUS *alatus* of *Sp. Pl.* and *Amæn. Acad.* we have retained the ſpecific name, though not the plant of *Hort. Kew.* or *Jacquin*, for which we intend the name of *viperatus*, that being the "*Siſyrinchium viperatum*" of PLUKENET, and mottled in the manner and ſomething the colour of a viper's head; of this we have never yet been able to obtain a live ſpecimen, but have ſeen a beautiful drawing of it by Mr. BAUER, in the Bankſian library, from a plant that flowered in the Kew garden ſome years ago; as likewiſe many dried ſpecimens*. THUNBERG has united under the GLADIOLUS *alatus* three very diſtinct ſpecies, viz. 1ſt. GLADIOLUS *galeatus, Jacq.* 2dly. GLADIOLUS *alatus, Hort. Kew.* and *Jacq. our viperatus.* 3dly, The preſent plant; which three ſpecies, together with GLADIOLUS *permeabilis, De La Roche;* GLADIOLUS *namaquenſis, Bot. Rep. t.* 122, and GLADIOLUS *viridis, Hort. Kew. add.* form a very ſingular and diſtinct ſection in this genus, agreeing in having the parts of fructification very much arched, the upper lateral ſegments of a more or leſs rhomboidal form, very patent, and broad; and, though they differ materially in other points, have a ſtriking reſemblance in the form of their corollas.

Our figure was taken at Mr. COLVILLE's Nurſery, in the King's-Road, Chelſea (with whom it bloſſoms in May) from a ſpecimen, the flowers of which were unuſually luxuriant.

Found by THUNBERG in many ſpots at the Cape of Good Hope, where it ſeems to be very common. It is among the moſt beautiful of the tribe; and, though not uncommon in different collections, is ſeldom ſeen in flower, the reaſon perhaps of its not appearing in *Hort. Kew.* for there is ſcarcely an arrival of Cape bulbs that does not contain ſome of the roots. Propagates very eaſily by ſeed and offsets. We have not yet learnt the mode of inſuring its flowering, but apprehend it requires rather more heat than many of the genus.

We preſume the ſpecific name was ſuggeſted by the extended wing-like appearance of the upper lateral ſegments of the corolla; ſcarcely from the ſomewhat winged appearance of the ſtem? *G.*

* Since this was written, we are happy to learn from a figure in the Botaniſt's Repoſitory for laſt month (ſee GLADIOLUS *orchidiflorus*, pl. 241) that the country is ſtill in poſſeſſion of this rare plant through the collection of GEORGE HIBBERT, Eſq. where it flowered in March laſt.

IRIS VISCARIA. BIRD-LIMED FLAG.

Claſs and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Cor. 6-partita: petalis alternis reflexis. *Stigmata* petaliformia.

Specific Character and Synonyms.

IRIS *viſcaria* (imberbis) foliis linearibus rectiuſculis caule terete rigido viſcoſo ſubcandelabri formiter polyſtachio, corollæ laciniis retroflexis ovato-oblongis acutulis, ſtigmatibus ſerratis. *G.*

IRIS *viſcaria*; imberbis, foliis linearibus planis, ſcapo viſcoſo. *Thunb. Diſſ.* 41. *Prod.* 12. *Willd. Sp. Pl. v.* 1. *p.* 239.

IRIS *viſcaria*; corollis imberbibus foliis linearibus planis, petalis patentibus caule viſcoſo. *Linn. Suppl.* 98.

Root bulbous. Stem about a foot high, wiry, ſmeared with a coat of yellowiſh brown gluten of a very tenacious quality, enſnaring all ſmaller inſects that happen to touch it; culmaceous, each joint embraced by an involucre, from which iſſue 3—4 ſimple branches arranged in the manner of thoſe of a chandelier, ſimilar to the ſtem and ſmeared with the ſame viſcid exudation, of which no other part of the plant poſſeſſes the ſmalleſt particle. Leaves longer than the ſtem, ſtriated on the outſide. Stigmas campanulately arranged, inner lips divaricately bifid. Cloſely allied to IRIS *bituminoſa*, but eaſily diſtinguiſhed from it by not having the root-leaf ſpirally rolled; is alſo a much ſmaller plant.

Found at the Cape, by THUNBERG, in the ſandy ſpots of Saldanha-Bay, near Loſper's-Farm. Introduced amongſt us by EDWARD WOODFORD, Eſq. Vauxhall, where our figure was taken in the month of June 1801. G.



S. Edwards del. Pub. by W. Curtis, Geo. Crowsent Sept. 1. 1792. F. Sansom sculp.

LACHENALIA QUADRICOLOR. FOUR-COLOURED LACHENALIA.

Claſs and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cor. 6-partita: Petala 3-exteriora diſſormia. *Capſ.* 3-alata: loculamenta polyſperma. *Sem.* globoſa receptaculo affixa.

Specific Character and Synonyms.

LACHENALIA *quadricolor*; foliis binis lineari lanceolatis canaliculatis ſurſum explanatis, floribus diſtantibus pedunculatis pendulis: petalis exterioribus dimidio brevioribus.

LACHENALIA *quadricolor.- Jacq. Icon. rar.* 2. *t.* 388. *Andr. Bot. Rep. Pl.* 148.

LACHENALIA *pendula* β. *Willd. Sp. Pl. tom.* 1. *p.* 181.

We have no heſitation in pronouncing this to be a very diſtinct ſpecies from LACHENALIA *pendula*, of which WILLDENOW conſiders it only a variety. It appears indeed to us to have greater affinity with LACHENALIA *tricolor*, though ſufficiently different from that alſo. The flowers chiefly differ from thoſe of *pendula*, in having longer peduncles, the outer petals much ſhorter, and the inner more ſpreading at the mouth; they are alſo more diſtant, growing alternately on the ſcape, which is weaker. The leaves are much longer, narrower, and more channelled, one of them longer than the other, and, as JACQUIN remarks, erect at firſt, but reclined from above the middle; they come out from the bulb fiſtular and ſplit open as they advance, and thoſe of the young offsets not opening at all, have very much the appearance of a different plant growing in the ſame pot.

In brilliancy of colours it far excels all its congeners.

Our drawing was taken at Mr. WOODFORD'S, Vauxhall, where it flowered the firſt time in February 1801, from bulbs imported from the Cape the preceding year.



Syd. Edwards del. Pub. by T. Curtis, St. Geo. Crescent Sep. 1. 1802 F. Sansom sculp.



Published by T. Curtis, St. Georges Crescent Oct.r 1.1802. Blackwall.

IXIA ARISTATA. SALVER-FLOWERED IXIA.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.—Vid. Num. 549.

Specific Character and Synonyms.

IXIA *aristata;* spica subthyrsiformi, spatha tubo 3—4plo breviori aristato-dentata, laciniis rotato-complanatis oblongis longitudine tubi, staminibus erectis pistillo subæqualibus. *G.*

IXIA *aristata. Thunb. Diss. n.* 15. *prod.* 9. *Syst. Veg. Murr.* 85. *Gmel. Syst. Nat.* 109. Nec vero Hort. Kew. aut Willd. Sp. Pl.

IXIA *patens. Herb. Banks.* quoad specimen spontaneum capense.

Leaves four, ensiform, nerved, acuminate, with a filiform cartilaginous margin: midrib prominent, inner leaf sheathing the stem nearly its whole length. Stem from a foot to two feet high, strict, round, somewhat compressed downwards, simple, or with two or three short patent branches. Spike somewhat scattered, with from five to nine flowers. Nearly allied to IXIA *patens* and *flexuosa*, but a far more robust plant; segments quite flat, rotate, and blunter; spathe more dentate, less membranous, and the parts of fructification more erect and collected. Scentless. Flowers in May. The specific name was undoubtedly suggested to THUNBERG by the spathes, which however he describes as "*aristato-dentatæ;*" and we guess that the inappropriate application of the word "*aristata*" was in some measure the cause of the mistake in *Hort. Kew.* where SPARAXIS *grandiflora* (IXIA *grandiflora, Bot. Mag. No.* 541, and IXIA *bulbifera, var. purpurea, Thunb.*) is taken for

for the preſent ſpecies. When a weakly plant, it bears a ſtrong *prima facie* reſemblance to IXIA *capillaris*, *var.* γ. but differs in the ſpathe and tube.

In the Bankſian Herbarium we find a Cape ſpecimen of this plant, marked IXIA *patens*, placed as a ſynonym by the ſide of the one from Kew Gardens, from which the deſcription of that ſpecies was taken by Dr. SOLANDER. In fact, the ſeveral intermediate varieties we have ſeen, lead us to ſuſpect, that IXIA *patens*, *flexuoſa*, and *ariſtata*, can ſcarcely be retained as diſtinct ſpecies.

Our drawing was taken at the nurſery of Meſſrs. GRIMWOOD and WYKES, Kenſington.

Found by THUNBERG, at the Cape, growing in moiſt ſandy places. Is very impatient of drought, and ſhould be ſet in a pan of water when near flowering. Varies with white, pale pink, and purple-roſe-coloured flowers.

The IXIA *leucantha* of JACQUIN is a variety of IXIA *patens*, agreeing with that in proportion of the limb to the tube, but approaching this in ſize and robuſtneſs of growth. *G.*

LACHENALIA PENDULA. PENDULOUS LACHENALIA.

****

Claſs and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cor. 6-partita. *Petala* 3 exteriora diſſormia. *Capſ.* 3-alata: loculamenta polyſperma. *Sem.* globoſa receptaculo affixa.

Specific Character and Synonyms.

LACHENALIA *pendula;* foliis binis ovato-lanceolatis erectis, corollis cylindraceis cernuis breviter pedunculatis: petalis externis parum brevioribus, ſpica compactiori.

LACHENALIA *pendula. Willd. Sp. Pl. t.* 2. *p.* 180. *Hort. Kew.* 1. *p.* 461. *Thunb. prod.* 64. *Jacq. ic. rar.* 2. *t.* 400. *Collect.* 3. *p.* 239. *Bot. Repoſ. pl.* 41. *Ejuſque Recenſ.* 62.

PHORMIUM *bulbiferum. Cyrilli Neap. faſc.* 1. *p.* 35. *t.* 12.

Though ſomewhat leſs brilliant in the colour of its flowers than the *quadricolor*, No. 588, this ſpecies, from its more compact growth, forms a no leſs deſirable plant. Flowers in April and May. Propagates eaſily by offsets from its bulbs. We are told in *Hort. Kew.* that it was introduced into the royal collection by Mr. MASSON, in 1774; but ſince this time it has been frequently imported both from Holland and immediately from the Cape. Our figure was drawn from a ſpecimen in the collection of EDWARD WOODFORD, Eſq. at Vauxhall.

In JACQUIN's figure the colours are not exactly the ſame as ours, and the whole plant is more ſlender. We were favoured, by Mr. WILLIAMS, of Turnham-Green, with a ſpecimen more reſembling this of JACQUIN's, which we ſuppoſe to be a mere variety of our plant.



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GLADIOLUS CARNEUS. FLESH-COLOURED CORNFLAG.

****

Claſs and Order.

TRIANDRIA MONOGYNIA.

Generic Character.—Vid. Nos. 538 & 562.

Specific Character and Synonyms.

GLADIOLUS *carneus;* ſpica diſticha, tubo curvato ſpatha longiore, laciniis nutantibus compreſſo-ringentibus: lateralibus ſuperioribus divaricato-patentibus recurvis acuminatis: infima anguſtiſſima. *G.*

GLADIOLUS *carneus. Jacq. ic. rar. t.* 255. *Willd. Sp. Pl.* 1. 213. cæteris excluſis ſynonymis.

GLADIOLUS *cuſpidatus. Bot. Rep. tab.* 147.

Leaves enſiform, nerved, ſheathing at the baſe, ſhorter than the ſtem, edged with a ſlender white filiform cartilage. Stem 1—2 feet high. Flowers 3—5, narrow funnel-form below the ſegments. Upper ſegment broadeſt, lanceolate, concave, acuminate, convolute above, where it is alſo recurved and ſometimes ſlightly undulate; the three loweſt narrower, nearly linear, loweſt ſtraighter, narroweſt. Differs from GLADIOLUS *cuſpidatus* beſides in colour and in being leſs waved, in having its ſpathes more inflated and not ſo convolute, ſpike more decidedly diſtich, flowers not ſo upright, tube ſhorter, more curved, leſs filiform; ſegments proportionably longer, being nearly the length of the tube, leaves more conſpicuouſly margined.

Native of the Cape. Flowers in May and June, earlier than GLADIOLUS *cuſpidatus*. Scentleſs; blows freely, and is eaſily propagated either by ſeed or offsets. The ſpike being too large for our page, one rank of its flowers was neceſſarily omitted, leaving the ſpathes to ſhew the diſtich character of the infloreſcence.

Our drawing was taken at Meſſrs. GRIMWOOD and WYKES's, Kenſington. G.



Syd Edwards del. Pub. by T. Curtis, 55 Queen Street [illegible] E Sanfam sculp



Jul. Edwards del. Pub. by T. Curtis, St. Geo: Crescent Oct. 1. 1802. F. Sansom sculp

GLADIOLUS NAMAQUENSIS. THICK-LEAVED CORNFLAG.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.—Vid. Nos. 538 & 562.

Specific Character and Synonyms.

GLADIOLUS *namaquensis*, foliis coriaceis oblongiusculis: margine crassa, lacinia suprema fornicato-concava: lateralibus rhombeo-ovatis planis extenso-patentibus: infimis conniventibus unguibus convolutis. *G.*

GLADIOLUS. *Herb. Bankf.*

GLADIOLUS *galeatus*. *Bot. Rep.* 122. *Ejusque Recens.* 15. (exclusis synonymis).

Bulb round, slightly compressed, resembling that of GLADIOLUS *alatus*. Leaves four, coriaceous; inner ones gradually shorter, narrower, farther sheathing; outer one oblong; subacute, attenuated into a kind of broad petiole, streaked with 10—15 equidistant, parallel, not prominent ribs, and surrounded by a thick, brownish, cartilaginous border, in the manner of WATSONIA *marginata*. Stem from six inches to a foot high, bluntly triquetral, flexuose, longer than the leaves, with a spathe-form decurrent leaf. Flowers 3—12, nodding, large, shewy, smelling like violets or orris root, expanding about May. Spathe much longer than the tube, outer valve subventricose, subdecurrent. Corolla ringent: tube with the faux turbinate and very short; upper segment oval-lanceolate; side ones shortly acute, flat, and spreading; lower ones connivent, propendent, unguiculate, lateral ones narrowest, cuneate, subacute, with convolute claws, lowest oval, broader than its lateral ones. Parts of fructification arched-adscendent, shorter than segments.

The

The Bankſian Herbarium contains a well-preſerved indigenous ſpecimen (nearly twice the ſize of the preſent) brought over by Mr. Masson; here we learn that it is a native of that part of South Africa, called Namaqua-Land, a conſiderable diſtance from the Cape.

A free blower, and propagates with facility both by ſeed and offsets.

Introduced by Mr. Nevin into the garden of Mr. Alderman Hibbert, a Gentleman whoſe munificence and urbanity leave to no lover of ſcience a regret that ſo extenſive and invaluable a collection ſhould be the property of a private individual. G.



Ed. Edwards del. Pub. by J. Curtis, 5th Dec. Crescent, Od. 1.1815. Vernon sc.

MORÆA UNGUICULATA. LONG-CLAWED MORÆA.

Clafs and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Cor. hexapetaloidea, 6-partita, ſubæqualiter patens laciniis baſi parum concretis. *Antheræ* ſtigmatibus petaliformibus vel ſubpetaliformibus bifidis accumbentes. *Capſ.* oblonga obſolete trigona. *Sem.* numeroſa. *G.* VIEUSSEUXIA *de la Roche, Deſcr.* 31.

bilabia

OBS. *Radix bulbus farinaceus rotundus putamine fibroſo paralleliter multi-rimoſo incluſus. Folia pauca, ſæpius unicum, fiſtuloſa a caule ſupra longitudinaliter fiſſa, canaliculato-debiſcentia, cuſpide terete ſtricta terminata. Caulis culmaceus teres polyſtachius ad nodos foliolo ſpathæformi involucratus, rami vel pedunculi axillares et terminales rarius unicus. Flores pedicellati bracteis incluſis diſcreti, ſucceſſive prodeuntes involucro ſpathaceo faſciati. Corolla fugax involuto-marceſcens (ſemperne?) laciniæ geniculatæ unguibus ſubereclis vel ſubrotatæ genubus et unguibus obſoletis, 3 interiores modo ſed rariſſime deſunt. Filamenta vel baſi tantum vel medio tenus vel ommino cuniculato-connata. Stigmata in nonnullis imminuta vix petaliformia at nunquam non fiſſa. Quandoque ſterileſcunt pedicelli.* G.

Ab IRIDI *(præterquam habitu) laciniis haud in tubum connatis apprime diſtinguenda.* G.

MORÆA *cærulea, ſpiralis (Bot. Mag.) melaleuca, et puſilla ad* ARISTEAM *revocandæ.* G.

Specific Character.

MORÆA *unguiculata;* imberbis, laminis interioribus parvis tridentato-partitis: exterioribus obovatis ſubacutis unguium anguſtarum longitudine, filamentis omnino coalitis ungues æquantibus. *G.*

When we obſerved in No. 577, that the corolla of MORÆA decayed by twiſting itſelf ſpirally into a column, we then intended that

that name for another genus, and to have adopted that of VIEUSSEUXIA for this, so that the remark is now inappropriate to Moræa; a genus so named by MILLER from his friend ROBERT MORE, Esq. whom he states to be learned in various branches of natural history, and particularly in that of botany*; the species on which he founded it was MORÆA *vegeta*. Those that have regulated us in the present essential character are IRIS *ciliata*, *minuta*, *tripetala*, *spathacea*, *ramosa? angusta*, *setacea*, *pavonia*, *crispa*, *tricuspis*, (Bot. Mag. No. 168.) *villosa*, (Bot. Mag. No. 571.) *unguiculata*, *papilionacea*, *edulis*, *tristis*, (Bot. Mag. No. 577.) *polystachia? viscaria*, (Bot. Mag. No. 587.) *bituminosa*. MORÆA *juncea*, *vegeta*, (*iriopetalæ* Willdenovii *varietates*) *collina* et *elegans* (Hort. Schœnb.)

Our present plant, so nearly allied to *tricuspis* and *villosa*, differs from both, in not being bearded and in having its claws much narrower and equal to the laminæ of the largest segments, and from the latter, moreover, in not having a pubescent leaf and stem.

Introduced from the Cape by Mr. Alderman HIBBERT, at whose garden our drawing was taken, and where alone, we believe, it is at present to be found. Flowers in May. Propagates in the manner of MORÆA *villosa*.

This genus is certainly one of the most elegant divisions of the whole natural order, but from the extreme delicacy of the corollas of its species ill calculated for the Herbarium, in which scarcely any thing but the leaf and stem can be recognized, hence good figures from living specimens become the more desirable. *G.*

* Professor THUNBERG, in his Dissertation on MORÆA, mentions the name as given by LINNÆUS in honour of JOHANNES MORÆUS, M. D. at Fahlun; but this must be a mistake, LINNÆUS having avowedly adopted the genus on the sole authority of MILLER's Dictionary.

IXIA CRATEROIDES. CRIMSON IXIA.

Claſs and Order.

TRIANDRIA MONOGYNIA.

Generic Character.—Vid. No. 549.

Specific Character and Synonyms.

IXIA *crateroides*; pauciflora, foliis gramineis, tubo breviſſimo ſpatham ſcarioſam patentem vix æquante, limbo hemiſphærico-campanulato: laciniis ovalibus firmulis, ſtigmatibus antheras ſuperantibus. *G.*
IXIA *ſpecioſa. Bot. Rep. tab.* 186.
IXIA *campanulata. Herb. Bankſ.*

Bulb irregular, of a more ſucculent ſpongy ſubſtance, and not ſo farinaceous as uſual in the genus. Leaves 5—6, graſs-like, ſmooth, with a ſlightly prominent midrib, ſhorter than the ſtem. Flowers 1—2, rarely three, upright, largiſh, ſcentleſs. Stem ſimple, round, wiry, from ſix inches to a foot high. Spathes ſcarioſe, denticulately ſplit, patent; tube ſeveral times ſhorter than the limb, ſcarcely equal to the ſpathe. Limb ſubſphæroid-bell-ſhaped, ſegments ſeparate to the tube, oblong-oval, bluntiſh, ſomewhat concave, ſhining, of a more ſubſtantial conſiſtence than in moſt ſpecies, deep crimſon on the inſide, on the out purpliſh-red, traverſed longitudinally by a paler ſtripe. Filaments upright, patent, much ſhorter than limb, about the length of the anthers, purpliſh. Stigmas recurved, ſeparated but little beyond the ſummits of the anthers, which they generally overtop. Out of many hundred ſpecimens, both indigenous and from our own gardens, this is the only one we have ever ſeen with ſo many as three flowers, though the ſpecies is as liable as its congeners to vary in ſize of leaf and height of ſtem. Does not bloſſom ſo freely as many others, perhaps requires tenderer treatment. Flowers in July. Propagates abudantly by offsets. A pot of them exactly reſembles a pot of our common graſſes. Found, according to Mr. NEVIN, at the Cape, in ſandy ſpots near the twenty-four rivers.

Our figure was taken at Mr. COLVILLE'S nurſery, in the King's-Road, Chelſea. *G.*



Sw.d Edwards del Pub.d by T. Curtis, St. Geo. Crescent Oct 31. 1802 E. Sanf...



J. Edwards del Pub. by T. Curtis, St. Geo: Crescent Oct. 1. 1802. F. Sansom sculp

LAPEYROUSIA CORYMBOSA. LEVEL-TOPPED LAPEYROUSIA.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Cor. hypocrateriformis: tubus gracillimus in faucem turbinatam recto-continuam ſenſim dilatatus: limbus 6-partitus laciniis regularibus vel parum irregularibus. *Stam.* erecta. *Stigm.* tria, gracilia, bifida, patentia. *Sem.* numeroſa. G.

OBS. *Plantulæ ſpithameæ vix unquam pedales. Radix bulbus conico-campanulatus tegumento putamineo reticulato-rimoſo baſi dentato-multifido pro ætate uno vel plurimis imbricatim aggeſtis tectus. Caulis ſæpius præ foliis ſpathiſve decurrentibus alato-anceps vel triqueter, rigidus (exſiccato ſubligneo) ramoſus modo ramuloſus fruticulam emulans. Folia enſiformia, nervoſa, ad marginem intimam baſin verſus conniventer fiſſilia, in* LAPEYROUSIA fiſſifolia *apice tenus ſubplana dehiſcunt, hinc tranſverſo-paginata cauli obverſant. In nonnullis preſertim ſpontaneis ſpatharum carinæ et foliorum margines ſtrigoſæ.* LAPEYROUSIA juncea *ab habitu præfato plurimum recedit, ſpecies forte nimis diſparilis, novi generis primordium? Spica in* LAPEYROUSIA faſciculata *faſciculato-contracta ſpathæque univalves.* G.

Ab IXIA *et* GLADIOLO *ſtigmatibus bifidis, a* WATSONIA *floribus rectis ſeminibuſque non angulato-oblongis, a* MORÆA *tubo, a* WITSENIA *ſtigmatibus trinis diſcrepat.* G.

Specific Character and Synonyms.

LAPEYROUSIA *corymboſa* ſcapo ancipiti ramuloſo, ramis corymboſo-paniculatis ſurſum pauciflorigeris, limbo regulari tubo cum fauce breviore, ſtaminibus patentiſſimis. G.

IXIA *corymboſa. Sp. Pl.* 51. *Amæn. Acad.* 4. 300. *Thunb. Diſſ. n.* 10. (excluſo ſyn. de la Roche) *prod.* 9. *Murr. Syſt. Veg.* 84. *Houtt. Linn. Pfl. Syſt.* 11. 27. *t.* 77. *f.* 1. *Jacq. ic. rar.* 2. *t.* 288. *Coll.* 4. 179. *Willd. Sp. Pl.* 1. 199.

IXIA *criſpifolia Bot. Rep. tab.* 35.

CARYOPHYLLUS *monomotapenſis. Pluk. Alm.* 87. *t.* 275. *f.* 1.

A genus firſt propoſed by the Abbé POURRET, in a tract contained in the third volume of the Tranſactions of the Academy

demy of Sciences and Inſcriptions of Thouloufe, to which he has ſince added further explanation, in the thirty-fifth volume of the Journal de Phyſique, p. 431. The ſpecies that ſerved him for his foundation was LAPEYROUSIA (GLADIOLUS, *Thunb.*) *anceps*, his *compreſſa*, the only one known to him, and which he ſtates to be an aboriginal of the Iſle of France, adding, that his ſpecimen was tranſmitted by COMMERSON to THOUIN, and by the latter to himſelf; thus the miſtake in the habitat lies between the three; for it is certainly a native of the Cape, and not of the Iſle of France. The generic name he gives in honour of PICOT, then Baron de la PEYROUSE, ſince Inſpector of the Mines of the French Republic and Aſſociate of the National Inſtitute, well known by his works on the Natural Hiſtory of the Pyrenees;—not to be confounded with the celebrated but ill-fated navigator, known by the title of Compte de la PEYROUSE.

The ſpecies on which we have conſtructed our generic character are as follow: GALAXIA *plicata*, *Jacq.* (IXIA *heterophylla*, *Willd.* our LAPEYROUSIA *faſciculata*) GLADIOLUS *falcatus*, *Linn. fil.* IXIA *corymboſa*, *Linn.* GLADIOLUS *anceps*, *Linn. fil.* GLADIOLUS *fiſſifolius*, *Jacq.* GLADIOLUS *ſilenoides*, *Jacq.* GLADIOLUS *junceus*, *Linn. fil.*

The preſent ſpecies varies greatly in number of branches, thickneſs and height of ſtem, breadth and even criſpature of leaves; alſo, with white and plain blue flowers. The white variety we have never ſeen, but know it to be in the collection of Mr. HIBBERT. Scentleſs.

Found by THUNBERG in ſandy ſpots and roads about Swartland, at the Cape of Good Hope. Neither he nor JACQUIN obſerved its bifid ſtigmas, which the former deſcribes as globular, an appearance they often aſſume in a dried ſtate.

Our drawing was taken at the garden of G. HIBBERT, Eſq. at Clapham. Is as yet an exceeding rare plant. Flowers in May. *G.*



Syd Edwards del Pub.by I Curtis St.Geo. Crescent Oct 1.1802. F Sansom sculp

CRATÆVA FRAGRANS. SWEET-SCENTED CRATÆVA.

Class and Order.

DODECANDRIA (*rectius* POLYANDRIA) MONOGYNIA.

Generic Character.

Cal. 4-fidus. *Cor.* 4-petala aut 0. *Bacca* 1-locularis polyſperma.

Specific Character and Synonyms.

CRATÆVA *fragrans*; caule volubili, corollis regularibus: petalis longiſſimis undulatis, pedunculis capitato-racemoſis terminalibus teretibus.
CRATÆVA *moſchata. Herb. Bankſ.*
CRATÆVA *capparoides. Bot. Rep. pl.* 176.

Capparis and Cratæva are ſo nearly related, that it is not eaſy to find characters which will always diſtinguiſh them. Even in the artificial ſyſtem, they ought not to have been ſeparated into different claſſes, moſt of the ſpecies being polyandrous. Perhaps the only diſtinction in the parts of fructification is, that in Cratæva the ſtamens are attached to the column ſupporting the germ, whereas in Capparis they are attached to the edge of the receptacle. A ſlight difference, as the column itſelf is an elongation of the centre of the receptacle. In the habit of the plants there is this eſſential diſtinction, that in every ſpecies of Capparis the leaves are ſimple, in Cratæva ternate.

The CRATÆVA *fragrans* has ſeveral climbing ſtems, extending 10—20 feet, with a multitude of branches. Leaves alternate, petioled, trifoliate; leaflets ovate, entire, ſhining, ſhortly petioled. The flowers grow in bunches on long peduncles from the extremities of the branches, nodding whilſt in bud. Calyx conſiſts of four ovate-acuminate, concave, equal

equal leaves, deciduous. Petals four, very narrow, long-clawed, limb undulated and convolute towards the baſe, regularly patent. Stamens many, longer than calyx, ſhorter than petals, attached to the receptacular column near its baſe, incurved. Proper ſtyle o. Stigma annular. Germen ſupported upon a receptacular column, longer than the ſtamens, one-celled? containing many ſeeds. Fruit has never yet ripened with us. The flowers are of ſhort duration, but come in ſucceſſion for ſome weeks, very fragrant, approaching in ſmell to the fruit of the pine-apple (BROMELIA *ananas*).

Firſt diſcovered in Africa, by our particular friend, Dr. ADAM AFZELIUS, Botanical Demonſtrator to the Univerſity of Upſal, who never met with it but twice, once in the Iſland of Bananas, in April, when it was in full flower, and afterwards at Sierra-Leone, near Free-Town, towards the mountains, in January, when the ſeeds were ripe. In both places it grew near water on riſing and rocky ground, covering the rocks for a conſiderable extent with its widely-ſpreading ſtems and twining branches. He gave the ſeeds to T. EVANS, Eſq. Stepney, to whoſe liberality every poſſeſſor of this valuable acquiſition to the ſtove is indebted. Is propagated eaſily by cuttings, but to thrive well requires more room for its roots than a pot.

It is at the deſire of Dr. AFZELIUS that we have given it the ſpecific name of *fragrans*, that of *capparoides*, equally applicable to other ſpecies of Cratæva, though haſtily given by him to Mr. EVANS, as ſomething to remember it by, being never intended for publication.

Our drawing was taken at the garden of EDWARD WOODFORD, Eſq. at Midſummer 1801.

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* Belong to the Genus MORÆA, as now ſettled.

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